

# JENSEN®

# SSR2000



**SIRIUS**  
Satellite Radio



## **Thank You!**

*Thank you for choosing a JENSEN product. We hope you find the instructions in this owner's manual clear and easy to follow. If you take a few minutes to look through it, you'll learn how to use all of the features of your new JENSEN/SIRIUS satellite radio for maximum enjoyment.*

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## **JENSEN®**

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**[www.jensen.com](http://www.jensen.com)**

# Features

The SSR2000 consists of a Down Link Processor (DLP) and a Display Control Unit (DCU) with a dash mountable cradle. The compact design of the SSR2000 makes it easy to install and easy to use.

The DLP acts as a satellite receiver/digital processor for the SIRIUS Satellite Radio network. The DCU is a hand held control unit that utilizes a four line, scrolling, backlit, liquid crystal display. Depending on the listening category chosen, you can display Channel Name, Artist Name, Song Title and Channel Number.

**Note**

*Satellite broadcasting requires a subscription to SIRIUS Satellite Radio. For subscription information call toll free 1.877.539.SIRIUS (7474). Or visit SIRIUS online at [www.siriusradio.com](http://www.siriusradio.com) and click on the "Join" button. See Page 8 for more information.*

# Installation

## 1. Getting Started

*It's a good idea to read all of the instructions before you begin the installation.*

### **Installation Kit (purchased separately)**

The SSR2000 has two installation kits available, the SRFM1 or the SRFM2. The only difference between the two kits is the type of antenna included. The SRFM1 has a roof mount antenna and the SRFM2 has a universal mount antenna. Each kit includes:

- Antenna with 17 ft. (5.2 m) cable
- Power cable 19.6 ft. (6 m) cable
- DIN cable 19.6 ft. (6 m)
- Audio cable 20 ft. (6.1 m)
- FM modulator

### **Tools and Supplies Required**

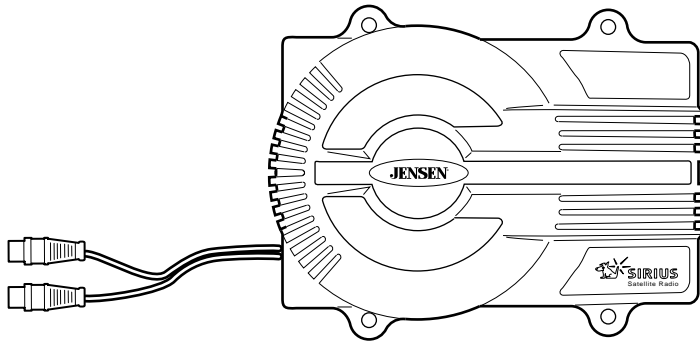
- Torx type, Flat and Phillips screwdrivers
- Wire cutters and strippers
- Electrical tape
- Crimping tool
- Volt meter/Test light
- Crimp connections
- Certain model vehicles (i.e.: GM, Ford, Nissan, etc.) may require use of antenna adapters. Antenna adapters can be purchased at your local installation shop or auto parts store.

## 2. Prepare

### **Disconnect Battery**

Before you begin, always disconnect the battery negative terminal.

**3. Location and Mounting**



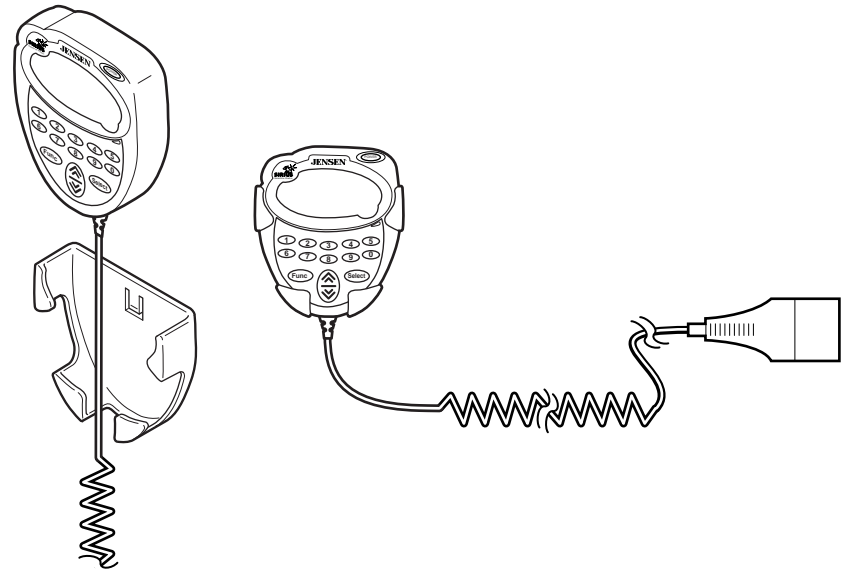
**Down Link Processor (DLP)**

The DLP's compact design allows greater flexibility in mounting. It can be mounted under a seat or in the trunk.

Select a location where air can circulate around the DLP. Do not cover the DLP with carpet or enclose it behind interior trim panels. Do not mount the processor in an inverted or upside down configuration. Every installation will be a bit different based upon vehicle design. Check all locations and placements carefully before making any cuts or connections.

**Important**

*Allow air circulation around the down link processor.*



**Display Control Unit (DCU)**

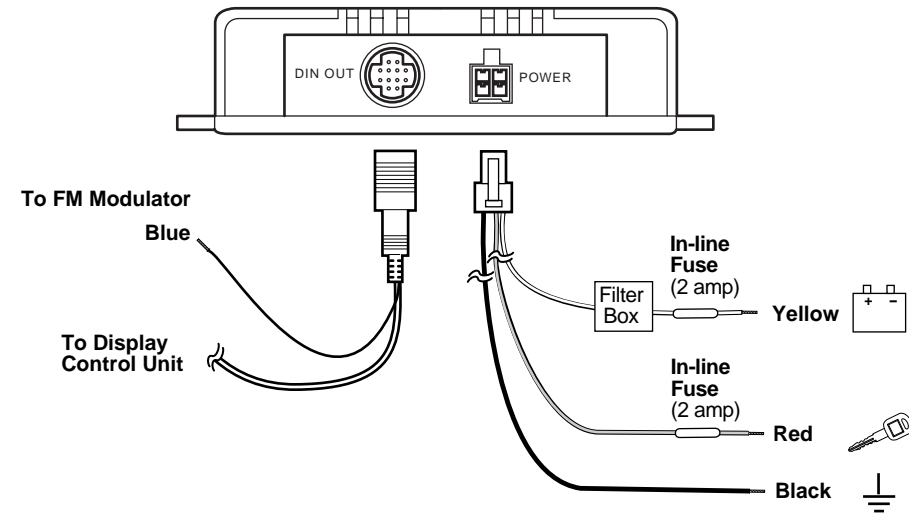
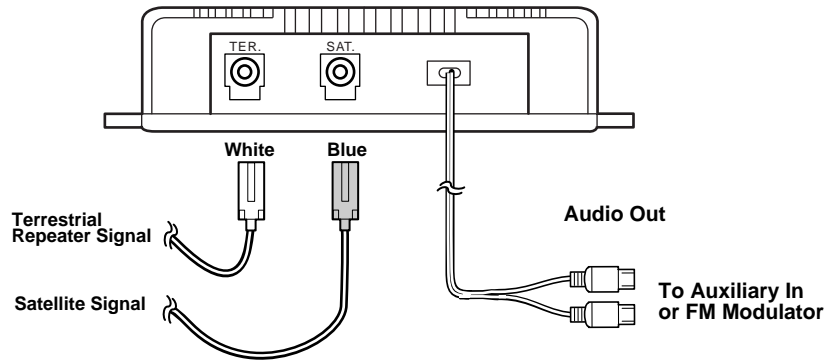
The Display Control Unit comes with a cradle that is designed to be dash mounted via Velcro.

### 4. Wiring

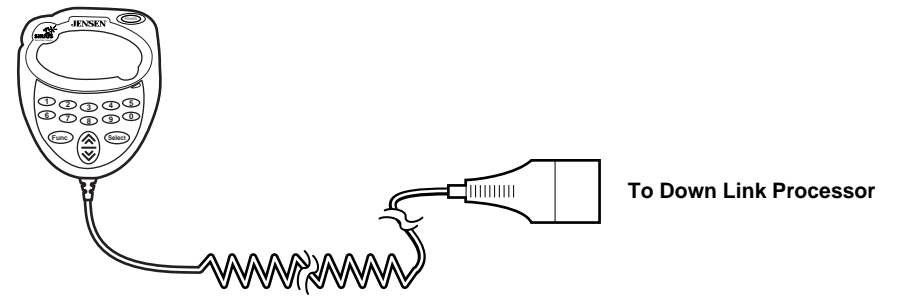
**Important**

If wiring connections are not completed as shown, the unit will not operate properly and could be damaged. Follow the installation instructions carefully, or have the installation performed by an experienced technician.

**DLP Wiring**



**DCU Wiring**



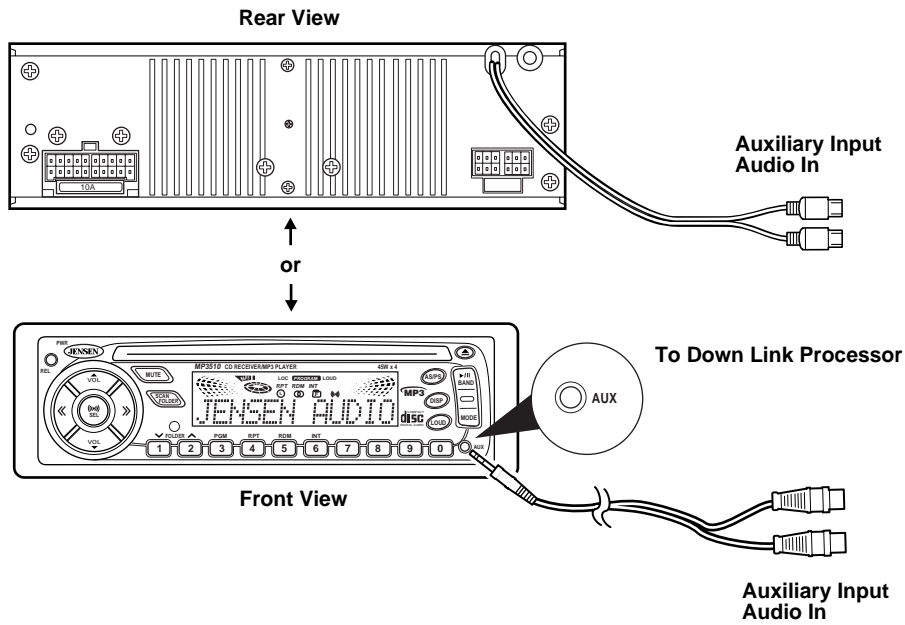
**Wiring Color Chart**

Connect wires according to chart:

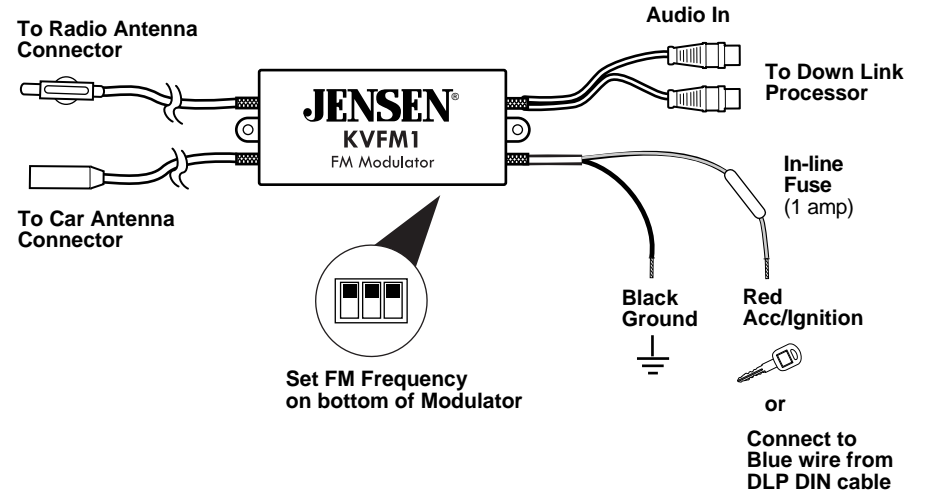
Red	12VDC, accessory/ignition power source
Yellow	Battery/Constant power source
Black	Chassis ground, connect to a clean unpainted metal surface.
Blue	Turn-on wire for FM modulator 200 mA maximum

**Radio with Auxiliary Input (Typical Radio)**

Some radios have RCA cabling for auxiliary input on the rear of the head unit while others may have a 3.5 mm connector on the front panel.



**FM Modulator**

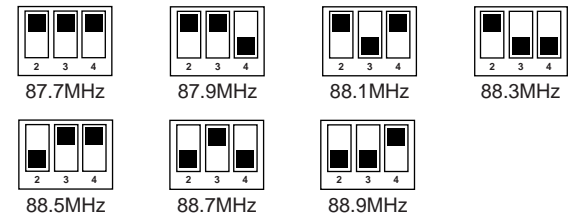


**Note**

Certain model vehicles (i.e. GM, Ford, Nissan, etc.) may require use of antenna adapters. If your vehicle antenna does not match the type of connectors on the FM modulator **DO NOT** cut them off. Antenna adapters can be purchased at your local installation shop or auto parts store.

**FM Modulator Frequency Selection**

One of seven frequencies can be selected for your listening region. Select an FM frequency in your area that is not being used. Preset this frequency on your radio receiver. Adjust modulator frequency by setting the DIP-switches according to the following chart:



## Antenna

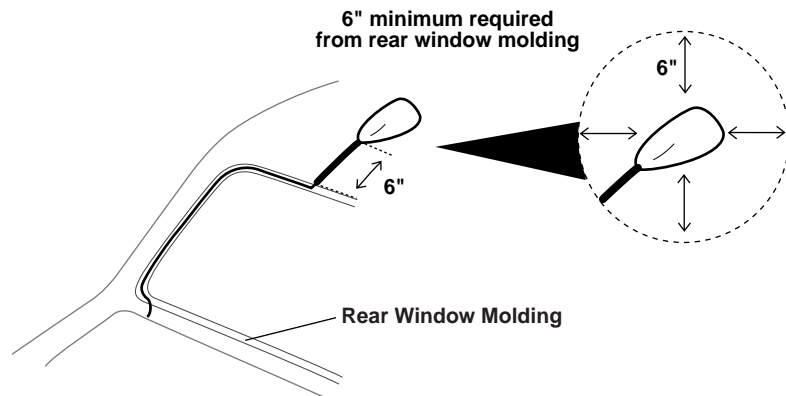
These instructions explain where the antenna must be mounted for best reception and to keep it securely in place. Antenna installation is semi-permanent. If you later decide to relocate or remove the antenna please see "Removing Antenna" and "Remounting Antenna".

### Mounting the Antenna

- 1 Select the location according to the mounting instructions for the antenna type (below).
- 2 Thoroughly clean and dry the vehicle surface. Remove all dust, dirt or wax.
- 3 Use a soft cloth and normal isopropyl alcohol to prepare the mounting location. Allow the area to dry thoroughly.
- 4 Verify that the cable will not be pinched or kinked.
- 5 Remove the paper covering from the foam adhesive on the bottom of the antenna.
- 6 Firmly press the antenna into position.

### Routing Antenna Cable

Most recent model vehicles have a plastic or rubber molding around the rear window. Tuck antenna wires under the molding and route the wire through the trunk area to the Down Link Processor.

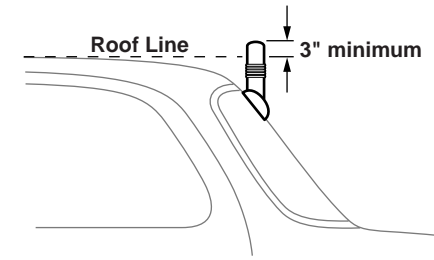


#### Note

If the vehicle has a roof rack, place the antenna between the bars of the rack.

### Roof Mount Antenna

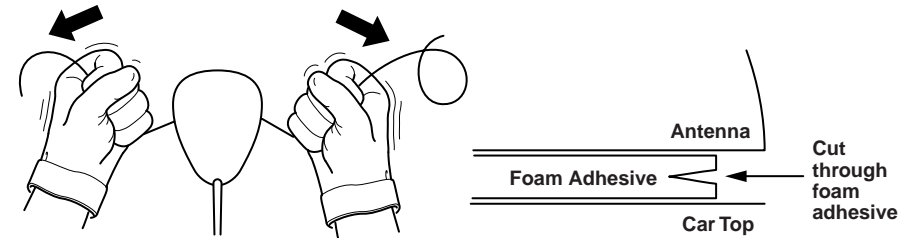
This type of antenna design is to be placed on top of a metal vehicle roof, thus utilizing the top of the vehicle as a "ground plane". The antenna needs a minimum installation radius of 6 inches. If the antenna is to be placed on a typical vehicle roof, then the antenna must be placed 6" forward of the back window. If the antenna is to be placed on an RV/travel trailer or commercial truck make sure the mounting surface is metal not fiberglass or plastic.



### Universal Mount Antenna

This type of antenna design can be mounted on any surface. It does not need a "ground plane". When mounting/installing this antenna, make sure that at least 3" of the antenna is above the roofline of the vehicle.

### Removing Antenna



- 1 Cut through foam adhesive. Use a length of a thin, strong and flexible line such as fishing line or dental floss. (It is a good idea to wear gloves to protect your hands.)
- 2 Using a sawing motion, cut through the foam adhesive.
- 3 Lift off the antenna.
- 4 Work carefully to remove the remaining adhesive from the vehicle. Gently use your finger to roll-up any leftover adhesive from the vehicle surface. Isopropyl alcohol and a soft cloth can be used to remove the remainder of the adhesive.

### Remounting Antenna

- 1 Work carefully to remove the remaining adhesive from the antenna. Gently use your finger to roll-up any leftover adhesive from the antenna's mounting surface. Isopropyl alcohol and a soft cloth can be used to remove the remainder of the adhesive.
- 2 Use 3M type "4910VHB" adhesive or an automotive grade double stick tape, available at your local installation shop or auto parts store, to secure the antenna.
- 3 Please refer to "Mounting the Antenna", "Routing Antenna Cable" and mounting instructions based on the antenna type (above) for complete details on mounting the antenna.



## 5. Reconnect Battery

When wiring is complete, reconnect the battery negative terminal.

## 6. Installation Confirmation Channel

After the SSR2000 installation has been completed the system can be tested for proper installation/operation via the SIRIUS installation confirmation channel.

- 1 Refer to Operation section. (See Page 10.)
- 2 Select Direct Mode from the DCU.
- 3 Direct access channel 184. This test signal/channel is provided by SIRIUS Satellite Radio to confirm proper installation of all the system components. If the DLP acquires this channel, the SSR2000 system is installed/working properly.

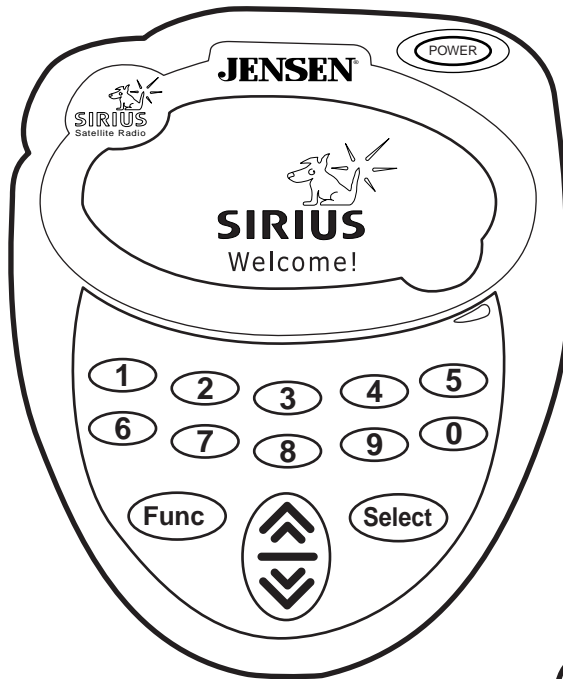
## 7. SIRIUS Satellite Radio Activation

For activation and subscription information call toll free 1.877.539.SIRIUS (7474). A SIRIUS Customer Care representative will take the necessary information and walk you through the activation process. Or you can visit SIRIUS online at [www.siriusradio.com](http://www.siriusradio.com) and click on the "Join" button.

Please have the following information ready when attempting to activate your service:

- SIRIUS Identification Number (See Page 17.)
- Valid Credit Card information (type, number, expiration date, etc.)
- Product Serial Number (PSN)
- Vehicle Identification Number (VIN)





### Display Illumination

There are three brightness levels. To change the brightness of the display:

Momentarily press **POWER** for less than one second to change brightness level. Each time **POWER** is momentarily pressed brightness level will change.

### Power On

Press the **POWER** button to turn the unit ON.

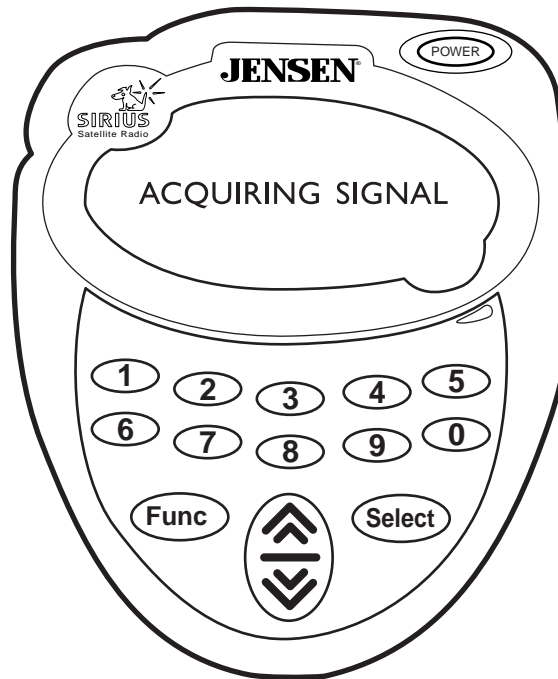
The unit will run a diagnostic check. The SIRIUS logo appears temporarily and then the display will read "Acquiring Signal" while it is tuning to a channel.

### Note

*On initial power up allow at least 5 minutes for the Down Link Processor to gather channel and category information and store it for future use. You will hear music as the Display Control Unit reads "Acquiring Text".*

### Power Off

Press and hold the **POWER** button for more than 2 seconds to turn the unit OFF.




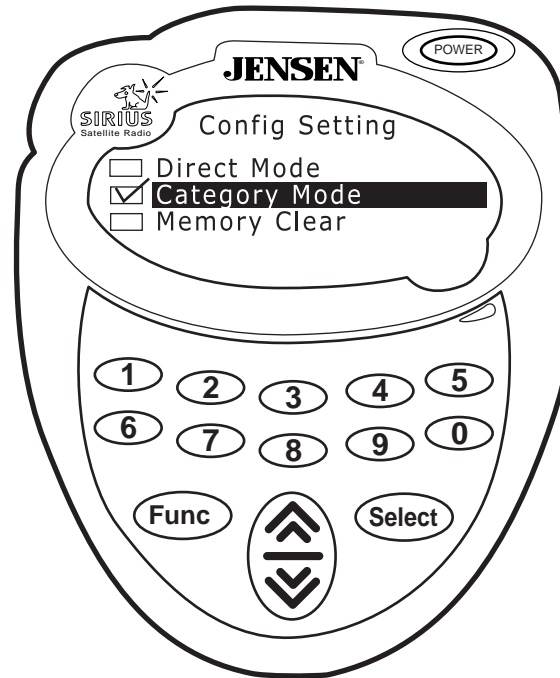
## Mode of Operation

### Select the Mode of Operation

- 1 Press and hold **Func** for more than 2 seconds. Display will show Config Setting with a list of available modes: Direct Mode, Category Mode and Memory Clear.

*Note: Direct Mode is the default setting.*

- 2 Press tune up or down to "highlight" desired mode. 
- 3 Press **Select** to confirm selection.  
A "check mark" will appear next to the mode selected.
- 4 Press **Func** to return to the main display.

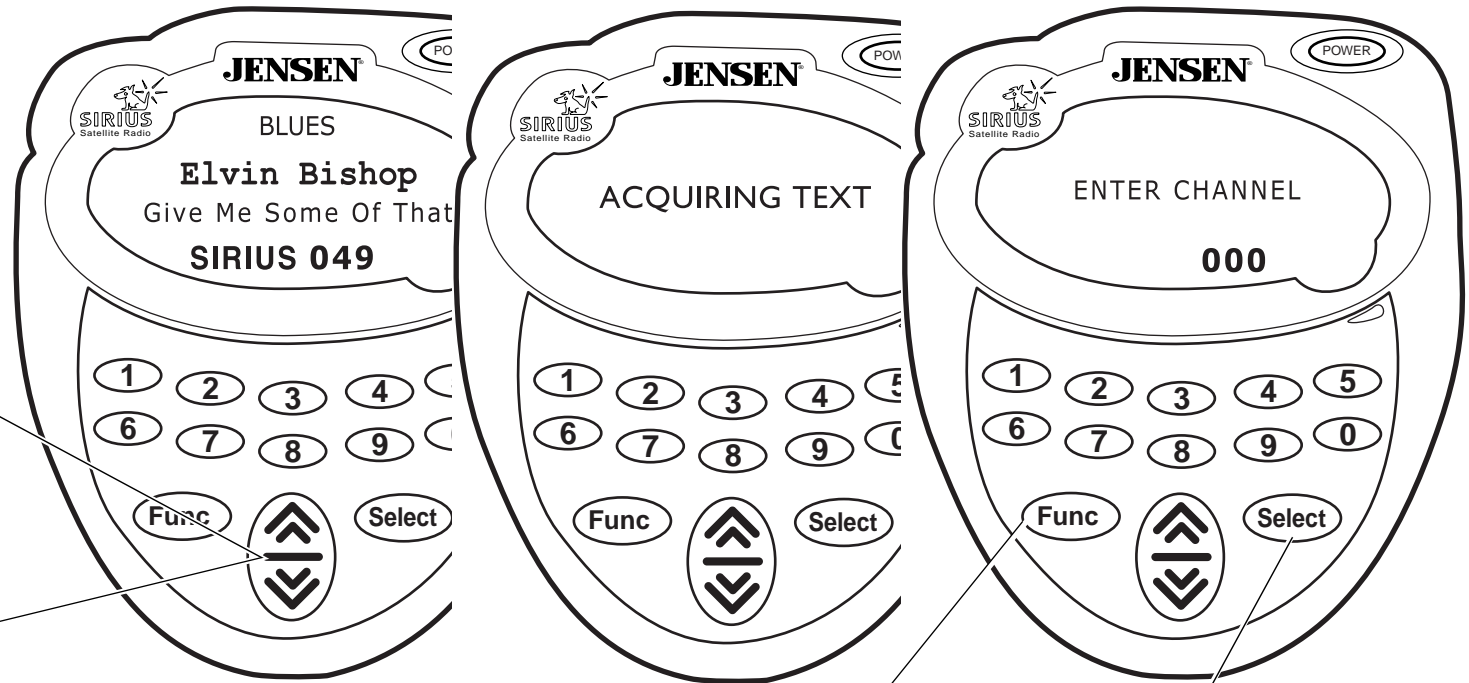


### Modes Of Operation

**Direct Mode** - Choose channels numerically by pressing tuning up or down or by "direct access" by pressing the **Select** button first and then entering the channel you want to select.

**Category Mode** - Choose channels by category instead of single channels. There are currently 12 categories to choose from.

**Memory Clear Mode** - Clears all preset information. (Channel and Category)



### Manual Tuning

- 1 Press tuning up or down to select a different channel.
- 2 DCU will tune immediately to next channel. Display will read "Acquiring Text" while channel data is being retrieved.

### Seek Tuning

- 1 Press and hold tuning up or down for more than 2 seconds and continue to hold to activate the "seek" mode. The DCU will display the channel number in rapid succession upward or downward. Release the tuning up or down button to stop on the desired channel.
- 2 Display will read "Acquiring Text" while channel data is being retrieved.

### Scrolling Data

If an Artist or Song title is too long to be displayed on the LCD, the scrolling function can be enabled to "scroll" the text across the display.

To enable scrolling, press the **Func** button and the text will scroll across the display 3 times and stop.

### Direct Access Tuning

- 1 Press the **Select** button, the display will flash: "ENTER CHANNEL".
- 2 Enter the channel number within 3 seconds using the number keys.
- 3 DCU will tune immediately to desired channel. Display will read "Acquiring Text" while channel data is being retrieved.

## Direct Mode (continued)

### Store a Preset Channel Into Memory

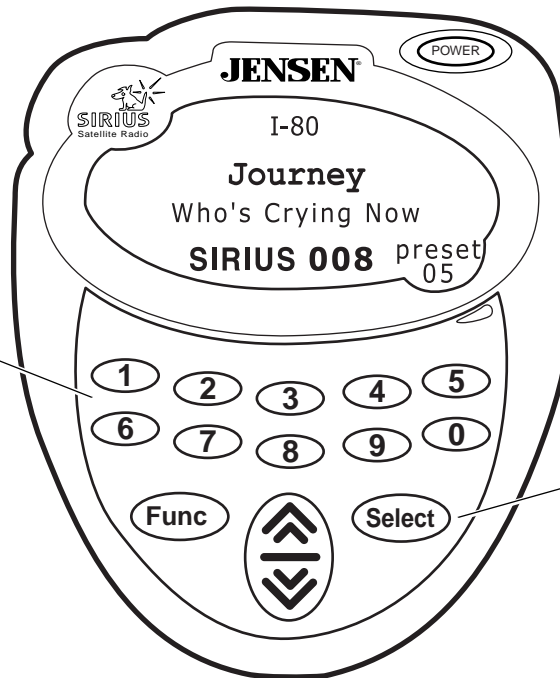
Up to 20 individual channels can be programmed into the DCU memory.

- 1 Select the channel you wish to save by pressing tuning up or down.
- 2 **To store presets 1-9:**  
Press and hold a preset button (numbered 1 thru 9) for more than 2 seconds.

#### To store presets 10-20:

Press the first digit (1 or 2) momentarily then the second digit (numbers 1 thru 0) for more than two seconds.

The channel is now saved into the DCU memory and "preset" now appears in the lower right portion of the display.



### Recall a Preset Channel

To select/recall a preset channel 1 thru 9, simply press the appropriate preset number button.

To select/recall a preset channel 10 thru 20, press the first digit momentarily then press the second digit within 2 seconds.

### Scan Channels

Channels can be "scanned". This allows you to "listen" to each channel for 5 seconds.

- 1 Press **Select** for more than 2 seconds to activate the "Scan" function.
- 2 Press **Select** again to stop the "Scan" feature.

**Manual Tuning**

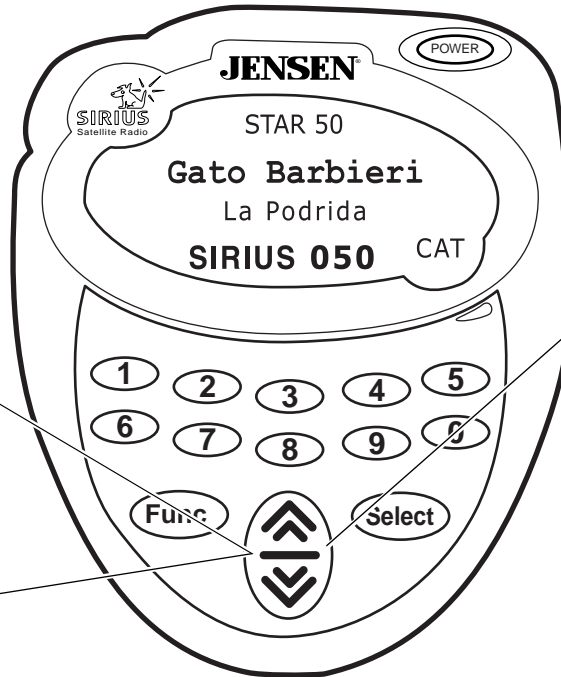
Press tuning up or down button to select a channel within a category.

**Note:**

*When tuning channels within a category, the tuning up or down button will only tune in channels within that particular category.*

**Seek a Category**

- 1 Press and hold tuning up or down for more than 2 seconds and continue to hold to activate the "seek" mode. The DCU will display the category number in rapid succession upward or downward.
- 2 Release tuning up or down to stop at the desired category.

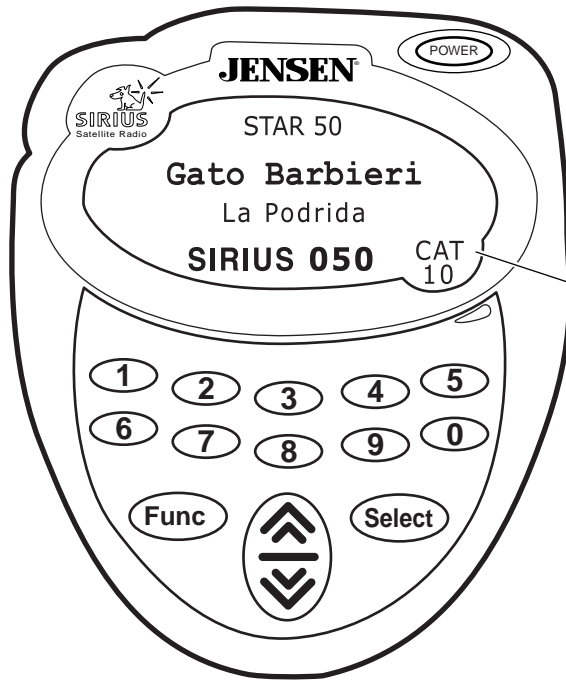


**Select a Category**

Press and hold tuning up or down for more than 2 seconds and then release to select a different category.

The category name will display momentarily in the lower right portion of the display above the preset number. The Channel name will be displayed in the upper center portion of the display, i.e.: "STAR 50".

## Category Mode (continued)



### Store a Preset Category Into Memory

Up to 20 categories can be programmed into the DCU memory. (Only 12 categories are currently available.)

- 1 Select the category you wish to save by pressing tuning up or down.
- 2 **To store preset categories 1-9:**  
Press and hold a preset button (numbered 1 thru 9) for more than 2 seconds.



#### To store preset categories 10-20:

Press the first digit (1 or 2) momentarily then the second digit (numbers 1 thru 0) for more than two seconds.

The category is now saved into the DCU memory and "Cat XX" now appears in the lower right portion of the display.

### Recall a Preset Category

To select/recall a category 1 thru 9, simply press the appropriate preset number button.

To select/recall a preset category 10 thru 20, press the first digit momentarily then press the second digit within 2 seconds.

# Skip / Restore Channel



### Skip/Delete a Channel

- 1 Use direct access to select the channel you want to skip/delete.
- 2 Press the **Func** and **Select** buttons simultaneously for more than 2 seconds.

The selected channel has now been deleted.

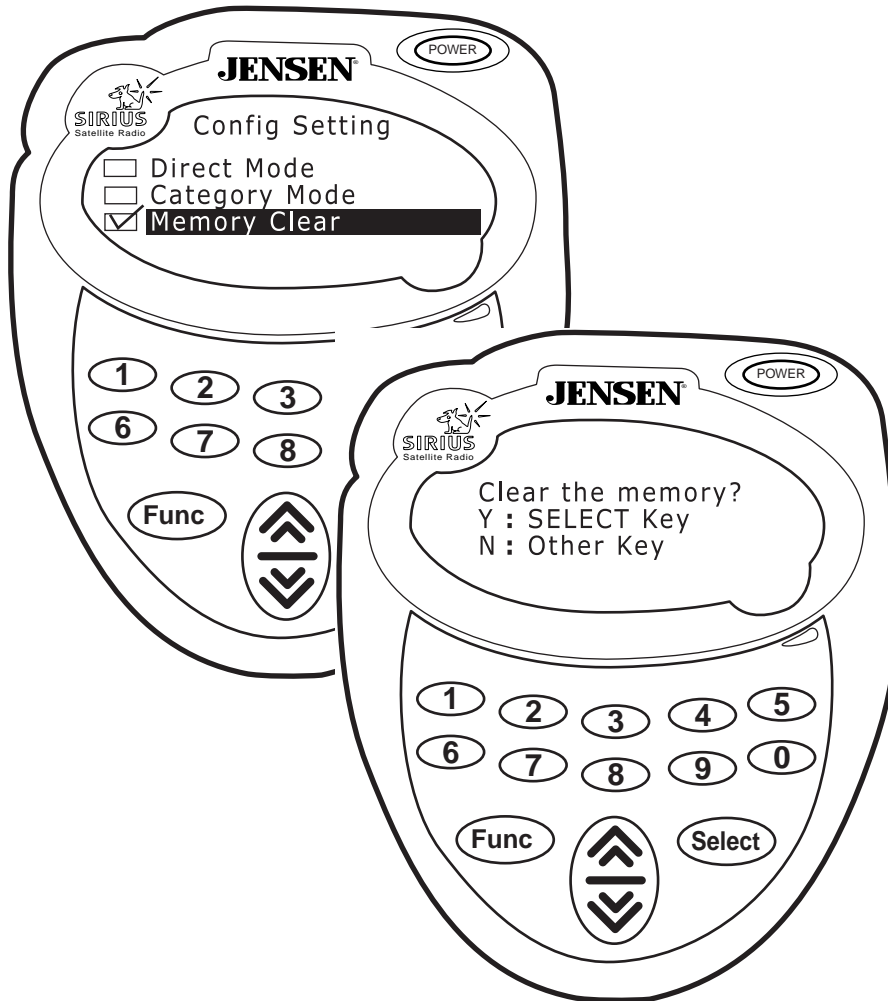


### Restore a Deleted Channel

- 1 Use direct access to select the channel you want to restore.
- 2 Press the **Func** and **Select** buttons simultaneously for more than 2 seconds.

The selected channel has now been restored.

## Memory Clearing (Resetting)

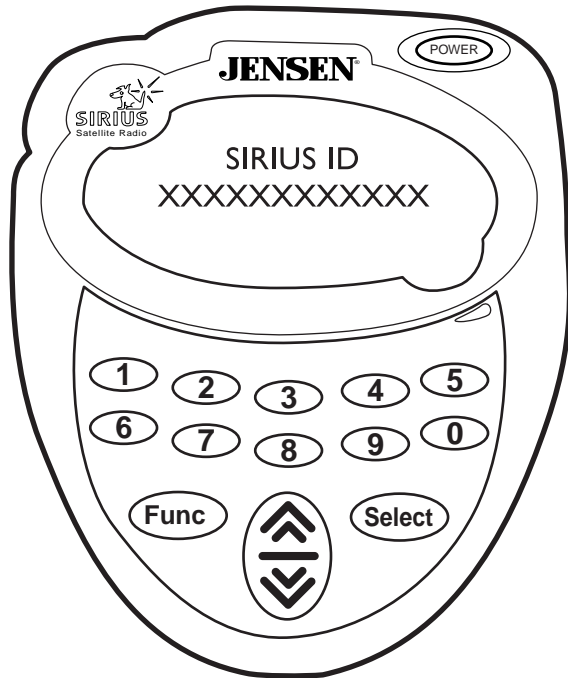


### Clear Memory

- 1 Press and hold **Func** button for more than 2 seconds to access the "Config Setting" menu.
- 2 Press tuning up or down to select "Memory Clear" mode from the menu.
- 3 Press **Select** to enable the Memory Clear function. "Clear the Memory?" prompt will appear on the display.
- 4 Press **Select** button to clear the memory. "Clearing the Memory" will be displayed momentarily as the memory is being cleared.



# SIRIUS Satellite Radio



### Accessing Your SIRIUS Identification Number

- 1 Select the "Direct Mode" on the DCU. (See Page 10.)
- 2 Enter channel number "000" via direct access. Your 12 digit SIRIUS ID number will appear on the LCD display. Write down your SIRIUS ID for reference when contacting SIRIUS Customer Service.
- 3 Press **Func** or any other button to resume normal operation.

# Troubleshooting

Problem	Possible Cause	Corrective Action
No power to DCU (power light/display not on)	Blown fuse	Check fuse(s).
	Power wires not connected properly	Check connections.
	DCU not connected to DLP	Check DIN connection.
No sound	Radio not tuned to proper FM modulator frequency.	Tune radio to proper frequency.
	Auxiliary mode not selected on head unit	Select AUX input mode.
Intermittent sound	Loss of signal*	See note.*
	Audio cable(s) not connected.	Check cable connections.
	FM modulator connection	Check connection to FM modulator.
	FM modulator frequency	Check FM modulator frequency.
Display reads "Tuning time out error"	DLP cannot acquire signal	Check antenna connections.
		Turn power off for 10 seconds and then turn back on.
		Call SIRIUS to check satellite status.

**\*Note:**  
 Man-made objects (metal truss type bridges, tall buildings, tunnels, etc.) and natural objects (mountains, canyons, valleys, etc.) can cause a loss of satellite and terrestrial signals momentarily. If the signal is lost the DLP will try and reacquire the satellite and/or terrestrial signal(s). When the DLP is repeatedly trying to reacquire a signal, the sound will be intermittent.

# Specifications

Power supply . . . . . 10.8-15.6 Vdc, negative ground  
 Audio Out (DLP) . . . . . 400 mVRMS  
 Fuses . . . . . 2 (2 amp) fast blow  
 DCU Dimensions . . . . . 4.5" x 3.5" x 1" (114mm x 89mm x 25mm)  
 DLP Dimensions . . . . . 7" x 5" x 1.25" (178mm x 127mm x 32mm)  
 FM Modulator Dimensions . . . . . 4" x 1.75" x 1.125" (102mm x 44mm x 29mm)

**Specifications subject to change without notice.**

## Limited One Year Warranty—USA (DLP and DCU only)

**Length of Warranty.** This warranty from Recoton Mobile Electronics, Inc. shall be in effect for a period of one year from the date of the first consumer purchase.

**Persons Protected.** This warranty will be enforceable by the original owner during the warranty period so long as proof of date of purchase from an authorized Jensen dealer is presented whenever warranty service is required.

**What is Covered.** Except as otherwise specified below, this warranty covers all defects in material and workmanship in this product. The following are not covered: damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product; damage occurring during shipment (claims must be presented to the carrier); or electrical interferences; any product purchased outside USA, or on which the serial number has been defaced, modified or removed.

**How You Can Get Service. U.S. Purchasers:** Please telephone Jensen at 1-800-323-4815. We will either inform you of the name and address of an authorized Jensen repair station which will service the product or will advise you to send the product to a factory service center.

If shipment of the product is required, it should be packed securely. The original dated bill of sale must always be included with the product as proof of warranty coverage.

**What We Will Pay For.** We will pay for all labor and material expenses required to repair the product, but you must pay any labor costs for the removal and/or installation of the product. If the product is shipped for warranty service, you must prepay the initial shipping charges, but Jensen will pay the return shipping charges if the product is returned to an address inside the USA.

**Exclusion of Certain Damages.** Jensen's liability is limited to the repair or replacement, at our option, of any defective product and shall not include incidental or consequential economic damages of any kind.

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 and 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.