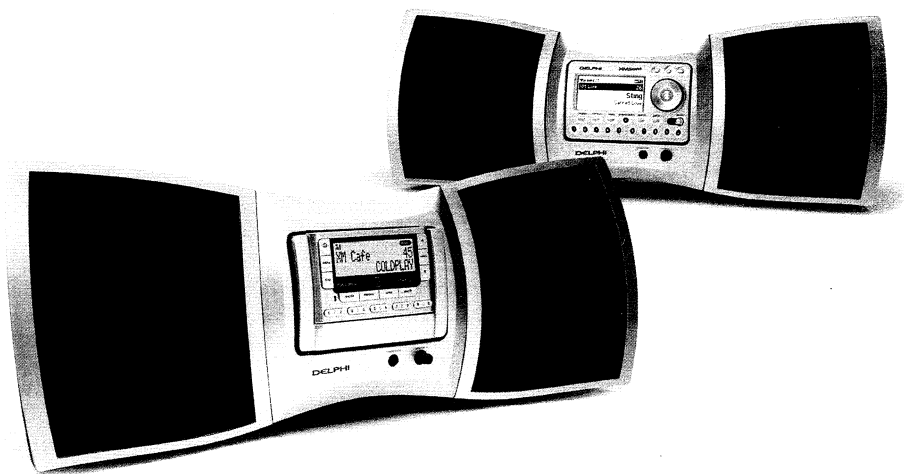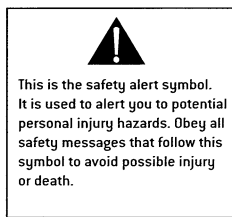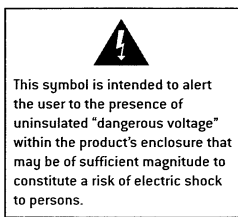# DELPHI

Delphi Audio System

Installation

Operation Guide

XM SATELLiTE RADiO

⚠ **Warning:** To prevent fire or shock hazard, do not expose the Delphi Audio System to rain, moisture, or water.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

The Delphi XM® SKYFi2™ and roadyXT™ Satellite Radio Receiver each incorporate an FM transmitter and are thereby classified as intentional transmitters. Changes or modifications not expressly approved by Delphi could void your authority to operate this equipment.

⚠ **Warning:** The FCC and FAA have not certified the SKYFi, SKYFi2, or roadyXT for use in any aircraft (neither portable nor permanent installation). Use of these devices in an aircraft could interfere with the aircraft navigation or communication devices and result in an accident including fatal injuries and/or property damage.

Owner's Record
The model number is located below and the serial number is located on the label on the rear of the Delphi Audio System.

Record the serial number in the space provided below. Refer to these numbers whenever you call upon your dealer regarding this product.
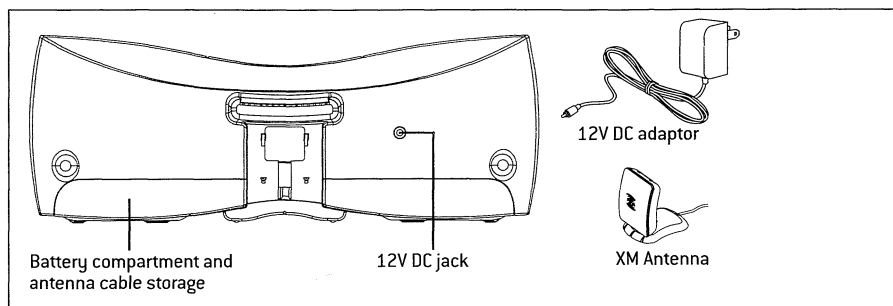
Model No.: DELPHI SA10201   Serial No.: _____

Table of Contents

Your Delphi Audio System Kit contains the following components:

Battery compartment and
antenna cable storage

12V DC jack

12V DC adaptor

XM Antenna

Setting up the Delphi Audio System

Set up your Delphi Audio System by
following these steps:

1. Connect the supplied 12V DC power
   adaptor to the jack on the rear of
   the Delphi Audio System, and the
   other end to a wall outlet.

2. Connect the XM Antenna to the
   antenna jack located inside the bat-
   tery compartment and antenna
   cable storage located on the bottom of the Delphi
   Audio System. The cover must first be removed
   by pressing down on the two tabs with your
   thumbs and then sliding it away from the front of
   the Delphi Audio System. The antenna cable can
   either be completely wound around the two cable
   hooks in the compartment, leaving just enough
   cable to attach the antenna to the four tabs on
   the back of the Delphi Audio System, or the
   entire 20' cable can be used to position the
   antenna away from the Delphi Audio System for
   better reception. To reattach the panel, line up
   all six tabs and then slide the panel toward the
   front of the unit until a click is heard. Make cer-
   tain that all six tabs are engaged and the rear of
   the panel is aligned with the rear cover.
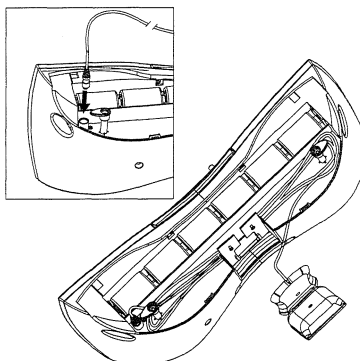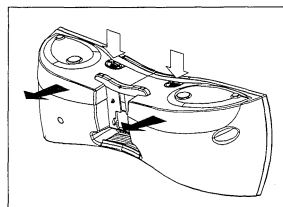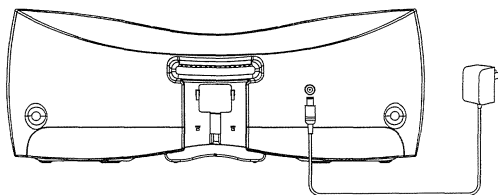
Using SKYFi/SKYFi2 with the Delphi Audio System

1. Insert the SKYFi/SKYFi2 Receiver (sold separately) into the cradle by first pressing in on the back of the black inset cradle in the Delphi Audio System. Then letting the cradle tilt forward, carefully slide the SKYFi/SKYFi2 Receiver down into the tray so that the alignment tabs on the sides of the tray line up with the slots on SKYFi/SKYFi2 and the connector is completely seated. Push on the top center above the display of the SKYFi/SKYFi2 Receiver so that it tilts back into the Delphi Audio System until a click is heard. The SKYFi/SKYFi2 Receiver can be removed by reversing this process.
2. Power up the Delphi Audio System combination by powering up the SKYFi/SKYFi2 Receiver using the power button on the receiver or on the remote control.
3. If the display reads "ANTENNA" after powering up, check that the antenna connection is secure and completely pushed in. Next, change channels (from 0 to 1 or from 1 to 0 if the receiver is not authorized yet). If the "ANTENNA" message remains, power down the radio, unplug the antenna, and look for any obvious damage in the connector, jack, or antenna cable. If no damage is detected, reconnect the antenna, turn the unit back on, and change channels again. If the message still appears, contact your retailer.
4. If the display reads "NO SIGNAL" after powering up, follow the instructions in "Setting up the Antenna" on page 6.
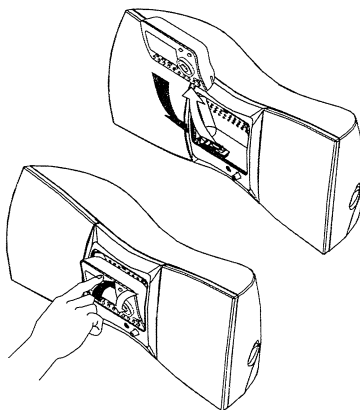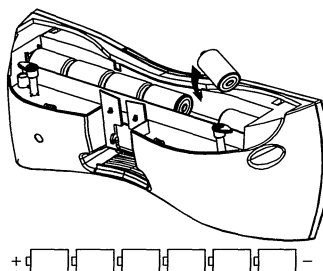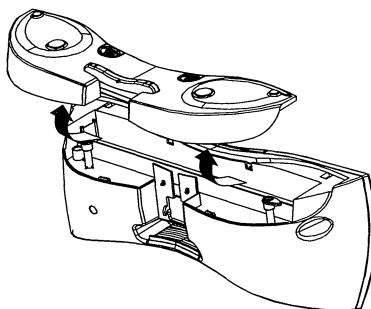
Using roadyXT with the Delphi Audio System

1. Insert the roadyXT Receiver (sold separately) into the adaptor included with the Delphi Audio System until snug.

   Caution: Do not use excessive force when inserting the receiver into the cradle. Doing so could cause damage to the unit.

2. Insert the adaptor containing the roadyXT into the cradle by first pressing in on the back of the black inset cradle in the Delphi Audio System. Then letting the cradle tilt forward, carefully slide the adaptor down into the tray so that the alignment tabs on the sides of the tray line up with the slots on the adaptor and the connector is completely seated. Push on the top center above the display of the adaptor so that it tilts back into the Delphi Audio System until a click is heard. The roadyXT Receiver adaptor can be removed by reversing this process.
3. Power up the Delphi Audio System combination by powering up the roadyXT Receiver using the power button on the receiver or on the remote control.
4. If the display reads "ANTENNA" after powering up, check that the antenna connection is secure and completely pushed in. Next, change channels (from 0 to 1 or from 1 to 0 if the receiver is not authorized yet). If the "ANTENNA" message remains, power down the radio, unplug the antenna, and look for any obvious damage in the connector, jack, or antenna cable. If no damage is detected, reconnect the antenna, turn the unit back on, and change channels again. If the message still appears, contact your retailer.
5. If the display reads "NO SIGNAL" after powering up, follow the instructions in "Setting up the Antenna" on page 6.
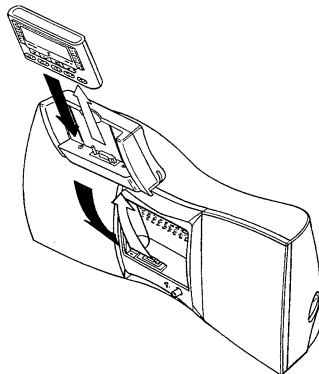
Using the Delphi Audio System with Batteries

The Delphi Audio System can be used with batteries (not supplied) to allow you to listen to XM outdoors or in other locations without access to an AC power source. Alkaline or rechargeable NiCD batteries are recommended. Battery life will vary depending on how the system is operated and the type of batteries being used. It is recommended that the AC adaptor be the primary power source for the Delphi Audio System in order to preserve battery life.

1. Disconnect the power adaptor from the back of the Delphi Audio System.
2. Remove the battery compartment and antenna cable storage cover, as described in step 2 in "Setting up the Delphi Audio System" on page 4.
3. Insert six "D" size (R20) batteries into the battery compartment. Make sure that the batteries are facing the correct direction by verifying that the positive (+) and negative (-) symbols in the battery compartment match up with the same symbols on the batteries.
4. It is recommended that the batteries be removed when system is not in use for an extended period of time.

Setting up the Antenna

Positioning the XM Antenna

The antenna that comes with the Delphi Audio System is a high-gain antenna that can receive the XM signal from XM's satellites and/or, depending on where you live, XM's land-based repeaters. It is recommended that the antenna be positioned near a south-facing window or outdoors with a clear view of the southern sky in order to receive the satellite signal. In some cases, it will be possible to receive the XM signal through standard home walls or a roof.

To position your antenna, first set up the Delphi Audio System as described in this guide. Next, position the antenna until you receive the strongest possible satellite signal. If the satellite signal is not available, you can optimize it for a terrestrial signal (where available).

Optimizing Antenna Position/Signal

1. Press the "Power" button on the receiver to turn on the Delphi Audio System.
2. Press the "Menu" button.
3. Using the scroll wheel, turn the wheel until "Antenna Aiming" is highlighted.
4. With "Antenna Aiming" still highlighted, press the "Enter" button found in the center of the scroll wheel. The display will show the strength of the satellite and/or terrestrial signals. The antenna signal strength is indicated by the number of filled bars.

Installing the XM Antenna on the Rear of the Delphi Audio System

When outdoors with a view of the southern sky, or in an area of repeater coverage, or when receiving a strong signal indoors, you can conveniently mount the antenna directly on the back of the Delphi Audio System.

1. Remove the battery compartment and antenna cable storage cover as described in "Setting up the Delphi Audio System," wind the antenna around the two cable hooks, leaving several inches of cable free, and replace the cover.
2. Fold the antenna down flat against its base.
3. Position the antenna so that the XM logo is upside down, then place the antenna base against the back of the Delphi Audio System so that the four pegs line up with the four slots in the antenna base.
4. Place the antenna so that the base is flush with the back of the Delphi Audio System, and then slide down approximately 3/8" so that the tab at the base of the system lines up with the slot in the bottom of the antenna.
5. Position the antenna by pivoting the half with the XM logo away from the back of the Delphi Audio System and turning the entire system until you get the strongest signal.
6. Use the "Antenna Aiming" screen as described in "Optimizing Antenna Position/Signal" to optimize the antenna tilt angle and position.
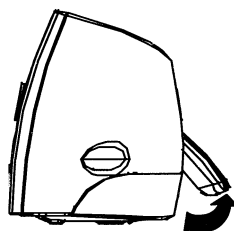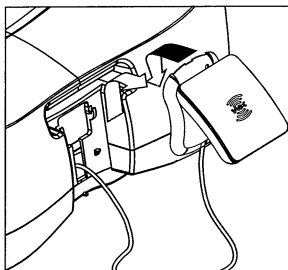
If you are unable to receive a signal, then position the antenna as described in one of the next two sections.

Indoor Installation on a Flat Surface

To aim your antenna at the satellite:

1. Set antenna flat against its base on a flat (horizontal) surface.
2. Turn the base of the antenna so that the XM logo is facing to the south.
3. Use the "Antenna Aiming" screen to optimize antenna tilt angle and position.
4. If necessary, experiment with different locations near a south-facing window or outdoors.

Your antenna comes with 20' of cable. If that is not sufficient to locate the antenna where there is a strong XM signal, purchase the Delphi XM Signal Repeater (Delphi model number SA10116) from your retailer or www.shopdelphi.com. Visit www.shopdelphi.com for more information about this accessory.
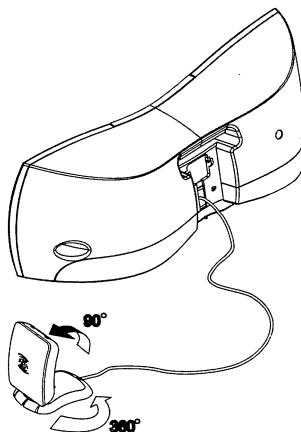
Outdoor Installation or Indoor Wall Mounting

The antenna can also be attached vertically to an external or internal wall if that is more convenient than placing it on a horizontal surface.

1. Holding your antenna up, find a wall location that ensures a strong signal. It is recommended that you use an extension cord to temporarily locate your receiver's home stand outdoors while optimizing the antenna location with the "Antenna Aiming" screen.

2. Attach four screws to the wall using the screw-locator pattern shown here. Photocopy the pattern to use as a template. Use screws with head sizes small enough to fit in the center of each of the four holes but large enough not to pop out of the elongated sections. Leave 1/8" of the screw shanks behind the heads sticking out of the wall.

1.6 in (40 mm)

1.4 in (35 mm)
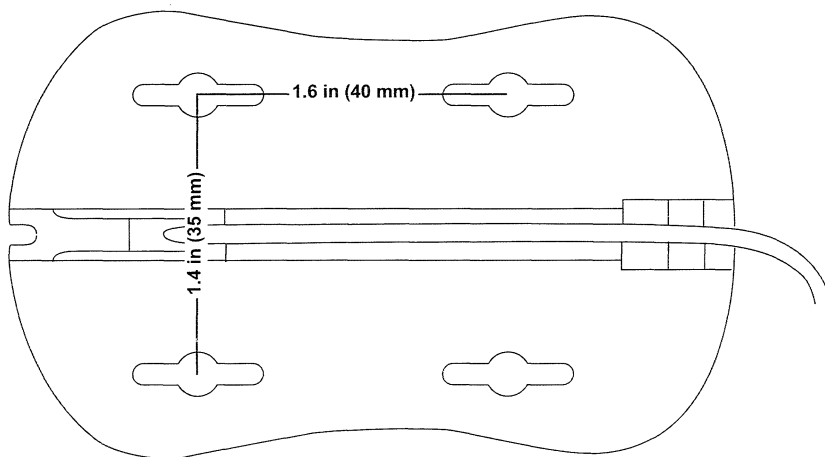
Photocopy this diagram of the screw-locator
pattern on the bottom of your XM Antenna to use
as a template for wall attachment.

3. Tilt the antenna fully back on the base. Place the antenna base on the four screw heads with the antenna pivot at the top and pull down approximately 1/4" until the base is firmly secured. Note that the XM logo will be upside down when the antenna is properly installed.
4. Tilt the antenna away from the wall/base until the signal is optimized.

> **Note:** Do not cut the antenna cable and attempt to splice it or attach alternative connectors or cable. The cable and connectors used in your receiver's home kit are specially chosen and attached at the factory to ensure that they will work with XM's unique frequency band. Use an XM-approved extension kit (Delphi model number SA10006) with your receiver.

Using the Delphi Audio System

Once the Delphi Audio System is set up and the SKYFi/SKYFi2 or roadyXT Receiver installed, the complete setup can be controlled as described in the receiver's operating guide.

Unique Delphi Audio System features include the following:

Volume
Volume can be adjusted using the volume knob on the Delphi Audio System. In addition, when the receiver is connected to the Delphi Audio System, the + and - controls on the remote control can also be used to increase (+) and decrease (-) volume.

Note that the "Line Out Level" cannot be reset while the receiver is in the Delphi Audio System since the volume control should be used to control the audio output instead. If the line out setting is adjusted while in a car cradle or home stand and the receiver is later reconnected to the Delphi Audio System, it will automatically return to the prior setting the next time it is used in a vehicle adaptor or home adaptor.

Bass & Treble

Bass and treble can be adjusted by pressing the "Menu" button, selecting "Bass + Treble", and then setting them in the same manner as other menu functions.

This feature only appears and only applies when the receiver is seated in the Delphi Audio System. If the receiver is removed and used in a vehicle adaptor or home adaptor, the bass and treble settings out of the receiver will be "flat" or "zero" since the audio signal will be processed by the vehicle or home audio systems. When the receiver is returned to the Delphi Audio System, it will return to the previously used bass and treble settings.

Headphones

The Delphi Audio System has a headphone jack conveniently located next to the volume control on the front of the unit. Many popular styles and types of headphones or earbuds can be used as long as their plugs and/or adaptors fit the industry standard 3.5 mm diameter stereo jack.

⚠ **Warning:** Hearing damage from loud noise is almost undetectable until it is too late. Your hearing can adapt to higher volumes of sound. Sound that seems normal can be loud and harmful to your hearing. Take precautions by adjusting the volume control on your audio system to a safe sound level before your hearing adapts to it.

To help avoid hearing loss or damage, do the following:
1. Adjust the volume control to the lowest setting.
2. Increase volume slowly until you hear comfortably and clearly.

Precautions

1. On power sources:
   - For AC operation, it is recommended that only the supplied AC power adaptor is used. If you need to use another one, make sure it is a 12V, 1500mA DC adaptor with a unified polarity-type jack.
   - The satellite radio receiver is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the satellite radio receiver has been turned off or detached.
   - Unplug the AC power adaptor from the wall outlet when it is not used for an extended period of time.
   - For battery operation, use six "D" size (R20) batteries.
   - The icon indicating operating voltage, power consumption, etc. is located next to the power jack on the rear cover.

   Caution: When the batteries are not being used, remove them to avoid possible damage that can be caused by battery leakage or corrosion.

2. On placement:
   - Do not place the Delphi Audio System on an inclined or unstable surface.
   - Do not place anything within 1/2" of the side of the cabinet. The audio/ventilation ports must be unobstructed for the Delphi Audio System to operate properly and prolong the life of its components.
   - Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the unit to prevent possible damage from the magnetic fields.
3. Do not immerse in water.
   - This product is not meant to be immersed in water or come in continuous contact with water.
   - Before opening or shutting the receiver cradle or battery compartment panel, be sure to wipe off water, dust, or sand on the outside of the unit.
   - If the Delphi Audio System is splashed with salt water, wipe clean with a damp cloth, and then dry with a soft dry cloth. Do not wash under running water; do not use soap or detergent; do not dry with an electric hair dryer.
   - The supplied AC power adaptor is not water resistant. To prevent shock hazard, avoid using the Delphi Audio System near water during AC operation.
   - Water in the headphone jack may cause rusting and possible malfunction.

Troubleshooting

1. The power is not on:
   - Connect the AC power adaptor to a wall outlet securely and make sure the wall outlet has 110V AC output.
   - Make sure the batteries are inserted correctly.
   - Replace all the batteries with new ones if they are weak.
2. There is no audio:
   - Unplug the satellite radio receiver from the Delphi Audio System and re-insert it.
3. Noise is heard coming through the Delphi Audio System:
   - Someone is using a portable telephone or other equipment that emits radio waves near the antenna (~2.3GHz). To solve this problem, move the portable telephone, etc. away from the unit.

Maintenance

To clean the cabinet panel and controls, use a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzene.

Note: Unplug the AC power adaptor before cleaning to avoid any electric shock hazard.

Specifications

	ITEM	UNIT	SPECIFICATION		REMARK	
			NOMINAL	LIMITED		
1	Continuous average power output	W	>4	>3.5	Rated output (10%) at 1 KHz	
2	Total harmonic distortion	%	>0.6	>1.0	Output: 0.5 W	Frequency: 70 Hz ~ 20 KHz
3	Sensitivity	mV	180	140~235	Line input	Frequency: 70 Hz ~ 20 KHz
4	Frequency response	Hz	65~22K	70~20K	-3 dB	0 dB: 0.775 V/1 KHz
5	Signal to noise ratio	dB	>65	>60	Level 1 0 dB: 2.0 V/1 KHz	
6	Channel separation	dB	>45	>40	Input: Short	Level 1 0 dB: 2.0 V/1 KHz
7	Input impedance	Ohm	–	–	Normal input	Frequency 1 KHz
			–	–	Floating input	
			>4.7K	>4.5K	Line input	
8	Max noise ratio	mV	3	5	Input: Short	
9	Battery power range	V	7~16	7.5~15	Operation fine	
10	Dimensions	in./mm	18 3/4" W x 7" H x 5 5/16" D (476 mm W x 178 mm H x 135 mm D)			

Warranty

Delphi Limited Consumer Warranty (United States)

Delphi Product and Service Solutions ("Delphi") warrants all XM Satellite Radio Products sold by Delphi (each "Product") to be free of defects in material and workmanship, subject to the following conditions:

The duration of Delphi's warranty with respect to each Product is limited to one (1) year from the date of sale to the original consumer purchaser.

No other express warranties are made with respect to any Product. All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited to the warranty period set forth above. This warranty is not transferable and applies only to the original consumer purchaser of the Product.

Delphi will, as its sole obligation under this warranty, replace or repair, at its option, any Product that does not conform to this warranty. Products may be repaired or replaced with new or with refurbished items. This limited warranty does not cover defects in appearance, cosmetic or decorative items, including any non-operative parts. Under no circumstances will Delphi be liable for any incidental or consequential damages under this warranty or any implied warranties. These remedies are the customer's exclusive remedies for breach of warranty. This limited warranty only extends to customers who purchase the Products in the United States.

Delphi will not be responsible for damage resulting from any (i) deviation of Delphi's operating instructions as printed in Delphi's catalog or on any packaging, labels or other literature provided with a Product, (ii) installation of a Product in a manner which is inconsistent with Delphi's written instructions, (iii) alteration or modification of a Product, (iv) misuse, (v) neglect, (vi) abuse, (vii) accident, (viii) normal wear and tear, (ix) commercial use, (x) improper storage, (xi) environmental conditions, including excessive temperature or humidity, (xii) service by anyone other than a Delphi authorized repair facility, (xiii) other improper application, installation or operation of this Product, or (xiv) defects or malfunctions of which Delphi is not advised within ten (10) days of the expiration of the limited warranty period.

How you (the Customer) can get service

To obtain warranty service during the first thirty (30) days after the date of purchase, you must return the defective Product with the original receipt to the original place of purchase. To obtain warranty service during the first thirty (30) days for Products purchased from

www.delphi.com and for all products for the remainder of the limited warranty period, you must contact Delphi by phone at 1.877.GO DELPHI (1.877.463.3574). If further clarification or additional information is required from Delphi, you may call Delphi at 1.877.GO DELPHI (1.877.463.3574).

If warranty service is needed at any time during the warranty period, the purchaser will be required to furnish a sales receipt/proof of purchase indicating the date of purchase, amount paid, and place of purchase. Customers who fail to provide such proof of purchase will be charged for the repair/replacement of any Product.

How state law relates to the warranty

Some states do not allow limitations on the duration of implied warranties, or the exclusion or the limitation of incidental or consequential damages. So the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights that may vary from state to state. **NO PERSON IS AUTHORIZED BY DELPHI TO MODIFY OR ADD TO THIS LIMITED WARRANTY.**

Delphi Limited Consumer Warranty (Canada)

Delphi Product and Service Solutions ("Delphi") warrants all XM Satellite Radio Products sold by Delphi (each "Product") to be free of defects in material and workmanship, subject to the following conditions:

The duration of Delphi's warranty with respect to each Product is limited to one (1) year from the date of sale to the original consumer purchaser.

Delphi makes no express warranties with respect to any Product except as set forth herein. All implied conditions and warranties, including the implied conditions and warranties of merchantable quality and fitness for a particular purpose are limited to the warranty period set forth above. This warranty is not transferable and applies only to the original consumer purchaser of the Product.

Delphi will, as its sole obligation under this warranty, replace or repair, at its option, any Product that does not conform to this warranty. Products may be repaired or replaced with new or with refurbished items. This limited warranty does not cover defects in appearance, cosmetic or decorative items, including any non-operative parts. Under no circumstances will Delphi be liable for any loss of revenue, loss of profits or failure to realize expected savings (collectively, "Economic Loss") under this warranty or any implied conditions or warranties. These remedies are the customer's exclusive remedies for breach of conditions or warranty. This limited warranty only extends to customers who purchase the Products in Canada.

Delphi will not be responsible for damage resulting from any (i) deviation of Delphi's operating instructions as printed in Delphi's catalog or on any packaging, labels or other literature provided with a Product, (ii) installation of a Product in a manner which is inconsistent with Delphi's written instructions, (iii) alteration or modification of a Product, (iv) misuse, (v) neglect, (vi) abuse, (vii) accident, (viii) normal wear and tear, (ix) commercial use, (x) improper storage, (xi) environmental conditions, including excessive temperature or humidity, (xii) service by anyone other than a Delphi authorized repair facility, (xiii) other improper application, installation or operation of this Product, or (xiv) defects or malfunctions of which Delphi is not advised within ten (10) days of the expiration of the limited warranty period.

How you (the Customer) can get service

To obtain warranty service during the first thirty (30) days after the date of purchase, you must return the defective Product with the original receipt to the original place of purchase. To obtain warranty service during the first thirty (30) days for Products purchased from www.delphi.com and for all Products for the remainder of the limited warranty period, you must contact Delphi by phone at 1.877.GO DELPHI (1.877.463.3574). If further clarification or additional information is required from Delphi, you may call Delphi at 1.877.GO DELPHI (1.877.463.3574).

If warranty service is needed at any time during the warranty period, the purchaser will be required to furnish a sales receipt/proof of purchase indicating the date of purchase, amount paid, and place of purchase. Customers who fail to provide such proof of purchase will be charged for the repair/replacement of any Product.

How provincial law relates to the warranty

Some provinces do not allow limitations on the duration of implied conditions or warranties, or the exclusion or the limitation of Economic Loss. So the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights that may vary from province to province. **NO PERSON IS AUTHORIZED BY DELPHI TO MODIFY OR ADD TO THIS LIMITED WARRANTY.**

DELPHI

Delphi Corporation
1441 West Long Lake Road
Troy, Michigan 48098-5090
U.S.A.
Customer Service [1] 877.GO DELPHI

www.delphi.com

Printed on Recycled Paper
©2006 Delphi Corporation. All rights reserved.
DPSS-06-E-103

The XM name, SKYFi, SKYFi2, roadyXT, and related logos are trademarks of XM Satellite Radio Inc.