

Operation and Maintenance Manual

Caterpillar Premium Corporate Radio

Language: Original Instructions





Important Safety Information

Most accidents that involve product operation, maintenance and repair are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. A person must be alert to potential hazards, including human factors that can affect safety. This person should also have the necessary training, skills and tools to perform these functions properly.

Improper operation, lubrication, maintenance or repair of this product can be dangerous and could result in injury or death.

Do not operate or perform any lubrication, maintenance or repair on this product, until you verify that you are authorized to perform this work, and have read and understood the operation, lubrication, maintenance and repair information.

Safety precautions and warnings are provided in this manual and on the product. If these hazard warnings are not heeded, bodily injury or death could occur to you or to other persons.

The hazards are identified by the "Safety Alert Symbol" and followed by a "Signal Word" such as "DANGER", "WARNING" or "CAUTION". The Safety Alert "WARNING" label is shown below.



The meaning of this safety alert symbol is as follows:

Attention! Become Alert! Your Safety is Involved.

The message that appears under the warning explains the hazard and can be either written or pictorially presented.

A non-exhaustive list of operations that may cause product damage are identified by "NOTICE" labels on the product and in this publication.

Caterpillar cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this publication and on the product are, therefore, not all inclusive. You must not use this product in any manner different from that considered by this manual without first satisfying yourself that you have considered all safety rules and precautions applicable to the operation of the product in the location of use, including site-specific rules and precautions applicable to the worksite. If a tool, procedure, work method or operating technique that is not specifically recommended by Caterpillar is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that you are authorized to perform this work, and that the product will not be damaged or become unsafe by the operation, lubrication, maintenance or repair procedures that you intend to use.

The information, specifications, and illustrations in this publication are on the basis of information that was available at the time that the publication was written. The specifications, torques, pressures, measurements, adjustments, illustrations, and other items can change at any time. These changes can affect the service that is given to the product. Obtain the complete and most current information before you start any job. Cat dealers have the most current information available.

NOTICE

When replacement parts are required for this product Caterpillar recommends using original Caterpillar® replacement parts.

Other parts may not meet certain original equipment specifications.

When replacement parts are installed, the machine owner/user should ensure that the machine remains in compliance with all applicable requirements.

In the United States, the maintenance, replacement, or repair of the emission control devices and systems may be performed by any repair establishment or individual of the owner's choosing.

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Foreword

Literature Information

This manual should be stored in the operator's compartment in the literature holder or seat back literature storage area.

This manual contains safety information, operation instructions, and maintenance recommendations.

Some photographs or illustrations in this publication show details or attachments that can be different from your product.

Continuing improvement and advancement of product design might have caused changes to your product which are not included in this publication. Read, study and keep this manual with the product.

Whenever a question arises regarding your product, or this publication, please consult your Cat dealer for the latest available information.

Safety

The safety section lists basic safety precautions. In addition, this section identifies the text and locations of warning signs and labels used on the machine.

Operation

The operation section is a reference for the new operator and a refresher for the experienced operator. This section includes a discussion of gauges, switches, product controls, attachment controls, and programming information.

Photographs and illustrations guide the operator through correct procedures of checking, starting, operating and stopping the product.

Operating techniques outlined in this publication are basic. Skill and techniques develop as the operator gains knowledge of the product and its capabilities.

Maintenance

The maintenance section is a guide to equipment care.

Safety Section

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General Hazard Information

SMCS Code: 7606

WARNING

Do not operate or work on this equipment unless you have read and understand the instructions and warnings in the Operation and Maintenance Manuals. Failure to follow the instructions or heed the warnings could result in injury or death. Contact your Caterpillar dealer for replacement manuals. Proper care is your responsibility.

Foreword

This document is a supplement to the Operation and Maintenance Manual for the equipment. Permanently attach this document to the Operation and Maintenance Manual for the equipment.

Introduction

This document provides information about the operation of the Cat ® Premium Corporate Entertainment Radio System.

Operation of the equipment and the maintenance of the equipment must not occur unless the instructions and warnings in the Operation and Maintenance Manual for the equipment have been read and the instructions and the warnings are understood. The contents of this document must be understood before the equipment that is equipped with the Cat AM/FM Radio System is operated.

Warnings and Compliance

Read this Operation and Maintenance Manual carefully before operating, and reserve this Operation and Maintenance Manual for future reference.

Precaution

- Disconnect the negative battery terminal of the vehicle while mounting and connecting the unit.
- When replacing the fuse, replace with an identical amperage rating.
- Using a fuse with a higher amperage rating may cause serious damage to the unit.
- Make sure that water, pins, or obstacles do not get inside the radio. Water, pins, and obstacles may cause malfunctions or create safety hazards such as electrical shock.

 If the machine has been parked for a long time in hot or cold weather, wait until the temperature in the machine becomes normal before operating the radio.

General Hazard Information

Before Operation

Do not raise the volume level too high. Keep the volume at a level at which you can hear outside warning sounds (horns sirens, and so on).

Stop the machine before performing any complicated operations.

Caution

Do not open the cover and do not repair. Ask the authorized dealer for help.

Note: Specifications and the design are subject to change without notice due to improvements in technology.

Operation and Maintenance Manuals are currently available at:

https://www.cat.com/radio-compliance

For mobile equipment or equipment that is located in areas where direct internet access is not available while the product is in use, a paper copy of the Operation and Maintenance Manual must be printed and kept with the product.

For more information or for a paper copy of the Operation and Maintenance Manual contact the nearest Cat dealer:

https://www.cat.com/en_US/support/dealerlocator.html

Regulatory Compliance Information

Radio Frequency Components

i08785934

Entertainment Radio

(Antenna (579-6826) - If Equipped)

SMCS Code: 7338

Table 1

Model	Cat Part Number	
Antenna As.	579 - 6826 Antenna As	

sDoC

European Union



Caterpillar Inc. 100 NE Adams Peoria, IL 61629 USA

Hereby, Caterpillar Inc. declares this radio equipment is in compliance with directive "2014/53/EU". The full text of the European Declaration of Conformity is available at the following web address:

https://www.cat.com/radio-compliance

Great Britain



Caterpillar Inc. 100 NE Adams Peoria, IL 61629 USA

Hereby, Caterpillar Inc. declares this radio equipment is in compliance with the relevant statutory requirements. The full text of the Great Britain Declaration of Conformity is available at the following web address:

https://www.cat.com/radio-compliance

Caterpillar suggests that the Declaration of Conformity is obtained shortly after purchase.

Specifications

Table 2

Electr	rical Specifications		
AM Antenna			
Frequency	535 - 1605 kHz		
Gain	2 dB (typical)		
	FM Antenna		
Frequency	88 - 108 MHz		
Gain	10 dB (typical)		
DAB Antenna			
Frequency	174 - 240 MHz		
Gain	12 dB (typical)		
SiriusXM Antenna			
Frequency	2320 - 2345 MHz		
Gain	30 dB (typical)		
Noise Figure	0.8 dB		
Efficiency	64%		
Current	120 mA (typical)		
Peak Gain	5.4 dBi (typical)		
Average Gain	-1.9 dB		
Polarization	LHCP		
Power			
Voltage	9V - 13V DC		
Current	50mA @ 12V		

Table 3

Mechanical Specifications		
Dimension	300mm x 96.61mm x 61.45mm	
Cable	RG-174	
Connector	AM/FM : TNC Female DAB : TNC Male SiriusXM : TNC Female	
Housing Material	ASA+PC w/UV Stabilizer	
Sealant	Silicone	
Weight	0.27 kg	
Max. Cable Pull Force	35.59 N	

Table 4

Environmental Specifications			
Sealing	IP67		
Temperature Range	-40°C to 85°C		
Thermal Shock	IEC 60068-2-14		
Humidity	Non-condensing 65°C 95% RH		

i08785935

Entertainment Radio

(Antenna (573-8527) - If Equipped)

SMCS Code: 7338

Table 5

Model	Cat Part Number	
Antenna As.	573-8527 Antenna As	

sDoC

European Union



Caterpillar Inc. 100 NE Adams Peoria, IL 61629 USA

Hereby, Caterpillar Inc. declares this radio equipment is in compliance with directive "2014/53/EU". The full text of the European Declaration of Conformity is available at the following web address:

https://www.cat.com/radio-compliance

Great Britain



Caterpillar Inc. 100 NE Adams Peoria, IL 61629 USA

Hereby, Caterpillar Inc. declares this radio equipment is in compliance with the relevant statutory requirements. The full text of the Great Britain Declaration of Conformity is available at the following web address:

https://www.cat.com/radio-compliance

Caterpillar suggests that the Declaration of Conformity is obtained shortly after purchase.

Specifications

Table 6

Electrical Specifications		
AM Antenna		
Frequency	535 - 1605 kHz	
Gain	Passive	
FM Antenna		
Frequency	88 - 108 MHz	
Gain	Passive	
DAB Antenna		
Frequency	174 - 240 MHz	
Gain	12 dB (typical)	
Power		
Voltage	5V - 13V DC	
Current	50mA @ 12V	

Table 7

Mechanical Specifications		
Dimension	546mm x 40mm	
Cable	RG-174	
Connector	AM/FM : FAKRA Code B DAB : FAKRA Code A	
Housing Material	PC	
Antenna Base	Stainless Steel	
Weight	157.1 g	
Max. Cable Pull Force	35 N	

Table 8

Environmental Specifications		
Sealing	IP67	
Temperature Range	-40°C to 85°C	

(continued)

(Table 8, contd)

Environmental Specifications		
Thermal Shock	IEC 60068-2-14	
Humidity	Non-condensing 65°C 95% RH	

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Entertainment Radio

(Premium Corporate Radio - If Equipped)

SMCS Code: 7338

Table 9

Model	Cat Part Number
Premium Corporate Radio (24V)	562-4777
Premium Corporate Radio DAB+ (24V)	562-4778
Premium Corporate Radio SXM (24V)	562-4779
Premium Corporate Radio (12V)	585 - 1577
Premium Corporate Radio DAB+ (12V)	585 - 1578
Premium Corporate Radio SXM (12V)	585-1579

sDoC

(Simplified Declaration of Conformity)

European Union



Caterpillar Inc. 100 NE Adams Peoria, IL 61629 USA

Hereby, Caterpillar Inc. declares this radio equipment is in compliance with directive "2014/53/EU". The full text of the European Declaration of Conformity is available at the following web address:

https://www.cat.com/radio-compliance

Great Britain



Caterpillar Inc. 100 NE Adams Peoria, IL 61629 USA

Hereby, Caterpillar Inc. declares this radio equipment is in compliance with the relevant statutory requirements. The full text of the Great Britain Declaration of Conformity is available at the following web address:

https://www.cat.com/radio-compliance

Caterpillar suggests that the Declaration of Conformity is obtained shortly after purchase.

Specifications

The following specifications are provided to aid in conducting any related hazard assessment and to ensure compliance with all local regulations:

Table 10

Radio Specification		
Model	Voltage Range	Current Draw
Premium Corporate Radio (24V)	16V - 32V	7 Amp
Premium Corporate Radio (12V)	10.8V - 16V	7 Amp

Table 11

Radio Specification			
Function Frequency Range			
WB	162.40 MHz - 162.55 MHz		
AM	522 kHz - 1710 kHz		
FM	87.5 MHz - 108.00 MHz		
DAB	153 kHz - 279 kHz		
SXM	2332.5 MHz - 2345.0 MHz		

Table 12

Radio Specification			
Model Frequency Range		Max. Power Output	
Bluetooth	2402 MHz - 2480 MHz	2.5 mW (+4dBm)	

Table 13

	Radio Band Frequency						
Parameter Europe		United States	Latin America	Japan	China	Saudi Arabia	
	Range (MHz)	N/A	162.40 - 162.55	N/A	N/A	N/A	N/A
WX	Seek Step (kHz)	N/A	25	N/A	N/A	N/A	N/A
	Manual Tune Step (kHz)	N/A	25	N/A	N/A	N/A	N/A
LW	Range (kHz)	153 - 279	N/A	N/A	N/A	N/A	N/A
	Seek Step (kHz)	9	N/A	N/A	N/A	N/A	N/A
	Manual Tune Step (kHz)	9	N/A	N/A	N/A	N/A	N/A
	Range (kHz)	522 - 1620	530 - 1710	530 - 1710	522 - 1629	531 - 1602	531 - 1602
АМ	Seek Step (kHz)	9	10	10	9	9	9
	Manual Tune Step (kHz)	9	10	10	9	9	9
FM	Range (MHz)	87.5 - 108.0	87.7 - 107.9	87.5 - 107.9	76.0 - 90.0	87.5 - 107.9	87.5 - 108.0
	Seek Step (kHz)	100	200	100	100	100	100
	Manual Tune Step (kHz)	100	200	100	100	100	100

Certification Notices

FCC Notice

Interference

This radio complies with Part 15 of the FCC Rules and Industry Canada license - exempt RSS standards. Operation is subject to the following two conditions: (1) (2)

- · This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device.

Radiation Exposure

This device complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. RF Exposure guidelines can be found in Supplement C to OET65. The device also complies with RSS-102 of the IC radio frequency (RF) Exposure rules. Do not locate the transmitter near an antenna or operating with any other antenna or transmitter.

FCC Class B Digital Device Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. if the equipment is not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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 or more of the following measures:

Consult the dealer or an experienced radio/TV technician for help.

South Korea Notice for Users

This device has been approved for use in a commercial environment. If used in a domestic environment, there is a possibility of interference.

Modifications Statement

Caterpillar has not approved any changes or modifications to this device by the user. Any changes or modifications could void the users' authority to operate the equipment.

Operation Section

Operation

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Radio

SMCS Code: 7338

A CAUTION

When driving, always keep your eyes on the road and hands on the steering wheel, paying careful attention to normal driving tasks. As always, the driver is responsible for safe vehicle operation. Not keeping your eyes on the road and hands on the wheel while driving could result in injury to you or others.

Introduction

The information in this Operation Maintenance Manual describes features that may or may not be on the specific system either because the features are options that were not purchased or due to changes after the printing of this Operation Maintenance Manual. Information included in this Operation Maintenance Manual was accurate at the time of publication. Check with the dealer for details regarding changes that may have occurred.

The Radio system is controlled by using the buttons.

Note: It is important to know that there are two versions of these radios:

12 VDC

24 VDC

Stereo Receivers



Illustration 1
AM/FM/Bluetooth/USB/AUX

g06744974

Operation



Illustration 2 SXM/AM/FM/Bluetooth/USB/AUX

g06744979



Radio Pin out

Radio pinout is shown in Illustration 4

Cavity	Pin No.	Function	In/Out
A1	1	CAN-High	I/O
A2	2	CAN-Low	I/O
A3	3	Reserved	-
A4	4	Ignition	1
A5	5	PWR_ANT	0
A6	6	Reserved	
A7	7	Battery	1
A8	8	Ground	1
B1	9	Reserved	
B2	10	Reserved) = 1
B3	11	RF+ (Speaker)	0
B4	12	RF- (Speaker)	0
B5	13	LF+ (Speaker)	0
B6	14	LF- (Speaker)	0
B7	15	Reserved	
B8	16	Reserved	1
C1	17	Ground	1
C2	18	Amplifier Sense	1
C3	19	Reserved	
C4	20	Telephone Mute	1
C5	21	Reserved	1
C6	22	Reserved	•
C7	23	AUX 2 Left	1
C8	24	AUX 2 Shield GND	1
C9	25	AUX 2 Common	1
C10	26	AUX 2 Right	1
C11	27	AUX 2 ON_OFF	1
C12	28	Reserved	
C13	29	Reserved	•
C14	30	Reserved	
C15	31	MIC + (BT)	1
C16	32	MIC - (BT)	1
C17	33	AUX 3 Shield GND	1
C18	34	AUX 3 Left	1
C19	35	AUX 3 Common	1
C20	36	AUX 3 Right	1

Illustration 4 g06613634

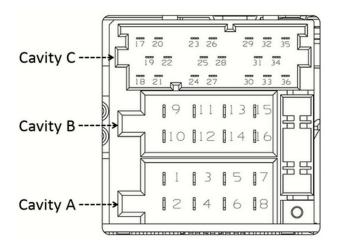


Illustration 5 g06425480

General Radio Receiver Functions

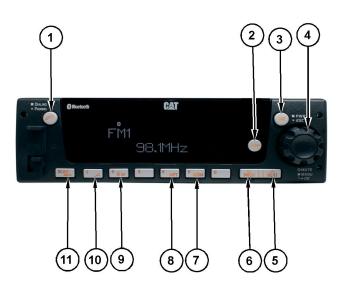


Illustration 6 q06744959

- (1) Phone
- (2) Disp (Display) (3) SRC/PWR/ESC (Source/Power/Escape)
- (4) Knob
- (5) Next
- (6) Prev (Previous)
- (7) RDM (Random)
- (8) RPT (Repeat)
- (9) Play/Pause, Microphone mute
- (10) Browse
- (11) SCAN/ASCN (Scan/Autoscan)

Radio Button Operation

SRC (Source/ Power)

Press SRC button to turn radioON and to toggle between sources. FM -> AM -> SXM or DAB (if supported) -> WX or LW -> USB/ipod (if supported and connected) -> Front AUX (if connected) -> Rear Aux -> Bluetooth Audio (if supported and connected).

13

Radio

Press and hold to turn the radio OFF.

One-Hour Timer

With the ignition OFF, pressing the SRC button will turn ON the receiver and activate one-hour timer of the radio. The radio will turn off after 1 hour or by pressing and hold the SRC button.

Volume Knob/On/Off

Rotate to increase or decrease audio volume. Press for less than 3 seconds to Mute audio. Press for more than 3 seconds to turn the Radio OFF.

PREV (Previous/Reverse)

Press to select previous track or station. Press and hold for Fast Reverse (FR) or Tune Down.

NEXT (Next/Forward)

Press to select next track or station. Press and hold for Fast Forward (FF) or Tune Up.

Phone (If Supported)

Press the Phone button to show the Bluetooth Menu. When Bluetooth is enabled and a device is connected, long press the button to display the Dial Menu. A short press of the button will accept an incoming call.

SCAN/ASCAN

Scans stations/MP3/WMA files and folders and in tuner, stores strongest stations to presets.

PLAY/PAUSE

Press to pause/ unpause current media.

RPT (Repeat)

Press to repeat current track. Press again to stop repeat. Look for the "RPT" icon in the radio display to turn this feature ON or OFF.

BROWSE

Press to navigate on a device and select a specific song or play content (applicable to USB sticks and iPods).

RDM (Random)

Press to play tracks randomly. Press again to stop random mode. Look for the "RDM" icon in the radio display to turn this feature ON or OFF.

ESC/SRC (Escape)

Press to exit one Menu Level. While on Bluetooth (if supported). Press to reject or cancel a call.

DISP (Display)

If vehicle Ignition is ON:

Press to Change Source Display Views.

If vehicle Ignition is OFF:

 Press to turn on the Radio and show the clock for a few seconds.

Radio

Audio Source

To access AM, FM, WX/LW, SXM/DAB (if supported), iPod, USB, Rear Aux, Front Aux, or BT Audio do the following:

 Press the SRC radio button to scroll through the options and select the desired one.

USB/iPod and BT Audio shall be accessed only if the radio model supports USB/iPod and BT and a device is connected/inserted for the specific source.

Note: If a device is connected through different sources at the same time, the functionality feature cannot be guaranteed to work at the best performance (device dependent) of the device. Example: Device connected through Front Aux and Bluetooth or USB and Bluetooth at the same time.

AM-FM-WX/LW Radio

Playing the Radio.

Tuning

Select the desired "Tuner Configuration".

When the radio is set to MANUAL, the radio will:

- Execute Manual Tuning when the "NEXT" or "PREV" buttons are short pressed.
- Execute Seek when the "NEXT" or "PREV" buttons are long pressed.

When the radio is set to AUTO, the radio will:

 Execute Seek when the "NEXT" or "PREV" buttons are short pressed. Execute Manual Tuning when the "NEXT" or "PREV" buttons are long pressed.

Manual Tuning

The current frequency will be increased or decreased by 1 step of 0.2MHz (USA FM mode), 10 kHz (USA AM mode) and one channel (25 kHz) in WX mode.

Seeking a Station

When the "Seek" function is activated, the radio increments/decrements the frequency until a tunable station is found.

Note: If a tunable station is not found, the radio will display "NO STATION FOUND".

Reference: Refer to REHS4871 for the procedure on how to change the radio frequency zone.

Presets

Storing Radio Station Presets

Short press any of the Preset (1-6) buttons. The frequency stored at the preset location is tuned when the button is released.

SCAN

To initiate the scan function, short press the SCAN/ ASCN button. When SCAN is initiated, the radio seeks up in frequency and stops on the next strong frequency for 8 seconds before continuing to seek for the next strong station.

Note: If no station is found in two passes through the band, the radio will display "NO STATION FOUND" and then tune the starting frequency.

AUTOSCAN

This function temporally stores the strongest six stations of the current band in the presets until the radio is powered off or the source is changed.

"AUTOSCAN" does not store the frequencies on the presets on numerical order. The presets are stored based on the order in which the presets were found and on the quality of the frequency.

To initiate the "AUTOSCAN" function, long press the "SCN/ASCN" button until the radio performs a beep. The "AUTO SCAN" icon will blink while the radio is storing the temporary presets.

When the storing process finishes, the radio will tune to the station stored in Preset 1 and the "AUTO SCAN" icon will be illuminated while the mode is active.

To tune any of the 6 frequencies or to store new presets, follow the steps defined in the presets section.

To exit this mode and return to the original presets execute any of the following actions:

- Press and hold the SCAN/ASCAN button
- Press the SRC/PWR button
- · Turn off the radio
- Make an ignition cycle
- · Disconnect the battery

WX

The WX band is for the Governmental weather radio services frequencies. The radio can tune the 7 weather channels. Refer to the "Tuning", "Presets", and "SCAN" sections in this manual for more information.

LW

The Long Wave radio is mostly used in Europe. Navigation capabilities are 153 to 279 KHz of frequency. The frequency increments between next or previous channels is of 9 KHz.

To navigate in LW, refer to the "Tuning", "Presets", and "SCAN" sections in this manual.

SXM (If Supported)

Vehicles with a valid SiriusXM [®] satellite radio subscription can receive SiriusXM programming.

SiriusXM satellite radio has a wide variety of programming and commercial-free music, coast to coast, and in digital-quality sound.

SXM Display

When SiriusXM is active, the channel number, channel name, artist name/content info, song title, or category name could be displayed on the screen. SiriusXM may update the information at any time.

To change the current display view, short press the DISP button.

When a new channel is selected, a song change occurs, SXM source is selected (from power-up or source change) or the information is updated, all the elements will be displayed using paging.

Note: The paging can be stopped by short pressing the DISP button.

SXM Categories Selection

SiriusXM stations are organized in categories.

The category list for SXM is in the following webpage:

http://www.siriusxm.com/sxm/pdf/sirius/channelguide.pdf

To change the current category, long press the NEXT/PREV button and the radio will tune the first channel on next or previous category.

Category Mode Enable/Disabled

Category Search Mode Enabled means that only channels in the current Category are searched. When enabled, the CATEGORY icon is turned on.

Category Search Mode Disabled means that all channels are searched. When disabled, the CATEGORY icon is turned off.

The default after a power-up is Category Disabled.

SXM Channel Selection

Presets and SCAN functions work the same as defined in the "AM-FM-WX/LW Radio" section of this manual.

NEXT Button

While in SXM, the radio will scroll to the next channel available in numerical order.

PREV Button

While in SXM, the radio will scroll to the previous channel available in numerical order.

Note: If the SXM service is not activated, only the free-to-air channels will be present.

Storing SXM Channel Presets

Tunes to the desired channel then long press any of the Preset buttons (1-6) until the radio produces a beep, confirming the station is preset.

For tune the stations stored short press any of the Preset (1-6) buttons.

SXM Radio ID

If tuned to channel 0, "RADIO ID" label alternates with the SXM radio eight-digit code. These two messages will alternate on the screen. This code is needed to activate the service.

DISP button does not work in channel 0. Channel 0 is not available in "Category Mode Enabled" .

SXM Messages

SXM BUSY – The radio is acquiring and/or processing audio and/or text data. No action is needed.

CHECK ANTENNA – SXM antenna or antenna cable is not connected to the radio or the antenna is shorted.

NO SIGNAL – SXM tuner module reports the "No Signal" condition. Only Channel 0 will work until a signal to the SXM satellites is restored.

Operation Section Radio

CHAN UNSUBSCRIBED – The SXM subscription on the radio was updated. Message will time out after 5 seconds.

SUBSCRIPTION UPDATED – The subscription of the radio was updated. To remove the message and return to the previous state press "OK" (Knob).

CH UNAVAILABLE – Requested channel is reported unavailable for a newly selected channel or the currently selected channel. Unavailable channels are channels that are in the legal channel range but are not currently available for use. Or are channels not part of the specific SXM subscription service package. After 5 seconds, channel 1 will be tuned.

TUNE START – When you tune to an SXM Preset and have not heard the current track previously, the radio will automatically play that track from the start using the "Instant Replay" buffer. To enable/disable the "Tune Start" mode, follow the steps under TUNE START.

INSTANT REPLAY – If tuned to a preset, the radio will automatically provide access to the buffered content of that channel through "Instant Replay" functions, so this content is available for you to navigate. To enable/disable the "Instant Replay" mode, long press the "DISP" button while SXM source is active. While "Instant Replay" is enabled, "Instant Replay" activates the second function of preset keys.

- · Skip Backward P1 short press
- Rewind P1 press and hold
- Play/Pause P2 short press toggle
- Skip Forward P3 short press
- Fast Forward P3 press and hold
- Go Live P4 Short press.

TUNE SCAN – As the radio performs the "Tune Scan" function, the radio automatically plays excerpts from the start of buffered songs and updates metadata (for example, artist/title) as each song excerpt is played. While "Tune Scan" is executing, the radio reacts to two navigation controls if invoked, "Skip Backward" and "Skip Forward".

- Presets must be stored before using "Tune Scan".
 If no presets are saved, "NOT ENOUGH
 CONTENT TO SCAN" will be shown on the
 display.
- To enable/disable the "Tune Scan" mode, long press the "SCAN" button while the SXM source is active.

DAB (If Supported)

When DAB is active, the Station Name, and category name could be displayed on the screen.

DAB Traffic Announcement (TA)

The radio makes an alert to notify there is an available TA. To hear the alert, press the volume knob in the option LISTEN when the alert is active. To close the announcement press "ESC" button or select the CANCEL option by scrolling with Volume Knob and pressing the knob.

DAB Announcement

When a DAB announcement event occurs (and the user is not in a phone call), the radio automatically tunes the necessary station and a full screen Pop-up is shown. Pressing "ESC" shall close the popup, return to last screen, and clear the announcement.

DAB Announcement Category

As the DAB Announcements you can receive alerts of different categories, the user can select which category the user wants to receive the announcement in the User Menu.

Alternate Frequency (AF)/Service Following (DAB-FM link)

While ON, if the current station loses signal the system shall attempt to find a station in DAB currently in simulcast, the display shall not change from the current station, only the new audio shall come through and the will be updated if necessary.

Regional (DAB Radios Only)

This functionality allows the user to lock down the set to the current regional or let the radio tune into other region-specific programming as the user moves into other region.

Refresh List

This method allows to user update all the DAB List.

In the User Menu the user can select the option "Refresh List"

During the updating list procedure, radio informs to the user the ongoing operation.

To cancel the Updating, press the ESC button.

Emergency Alert

When an emergency announcement event occurs (and the user is not in a phone call), the radio automatically tunes the emergency station.

Once the Emergency announcement is complete the pop-up is removed from the screen, or the user can press the button ESC to close the Pop-up.

NEXT Button

While in DAB the radio will scroll to the next station within the current station list.

PREV Button

While in DAB the radio will scroll to the previous station within the current station list.

Storing DAB Station Presets

Tune the desire station, and then long press any of the Preset (1-6) buttons until the radio produces a beep.

For tune the stations stored short press any of the Preset (1-6) buttons.

DAB Messages

Station Not Available – If signal is lost while on a station, the station name shall remain on the screen and "Station Not Available" advisory shall be displayed below.

No Signal – DAB tuner module reports the No Signal condition.

Station Currently Unavailable – If the station is not available, radio will display "Station Currently Unavailable".

 $\mbox{\bf No info}$ – When Radio Text is not available, radio will display "NO INFO" .

iPod (If Supported)

This radio supports the following iPod models:

- iPod classic (7th generation)
- iPod nano (7G)
- iPod touch (7G)
- iPhone (5S to XS)

Other iPods may be played, but functionality is not guaranteed.

Radio provides up to 2.1A of charge, so any device connected to the USB that requires less than 2.1A will be charged.

When an iPhone is connected as the Bluetooth audio source, connecting as iPod will disconnect the iPhone as the Bluetooth audio source.

There may be problems with the operation and function in the following situations:

- When connecting an iPod on which a more recent version of the firmware is installed than is supported by the radio
- When connecting an iPod with firmware from other providers is installed
- Connecting an iPod or iPhone with a nonauthentic Apple cable to the USB port cannot be guaranteed for charging or playback (it is recommended to always use authentic Apple certified cables to avoid this failure mode)
- The cable length is greater than 2 meters

Playing from an iPod

To connect an iPod:

- 1. Connect one end of the standard iPod USB cable to the dock connector on iPod.
- **2.** Connect the other end of the cable to the USB port on the front radio display.
- Radio will start playing from the iPod through the speakers of the vehicle and music info will be displayed (track number, song, artist, elapsed time, and album name, if available).
- **4.** If the iPod is an unsupported model, the iPod can be listened to in the vehicle by connecting to the auxiliary input jack using a standard 3.5mm (1/8 in) stereo cable.

Expected behavior when iPod is connected:

- The iPod battery recharges automatically while the vehicle is on.
- The iPod shuts off and stops charging when the vehicle is shut off.

iPod Menu

Use the following steps to navigate the iPod Menu:

- Press the magnifying glass (preset 1) button while USB source (iPod connected) is active to access the iPod Menu.
- 2. Rotate the volume knob or use the "Next" or "Prev" button to navigate through the different iPod menu options.
- 3. Use the iPod Menu to select:

Playlists

Use the following steps to navigate playlists:

1. Press to view the playlists on the iPod.

- Radio
- 2. Select a playlist name to view a list of all songs in the playlist.
- **3.** Select the song from the list to begin playback.

Artists

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Use the following steps to navigate artists:

- **1.** Press to view the artists on the iPod.
- 2. Select an artist name to view a list of all albums with songs by the artist.
- **3.** Select the song from the list to begin playback.

Albums

Use the following steps to navigate albums:

- **1.** Press to view the albums on the iPod.
- 2. Select an album name to view a list of all songs on the album or select "All Songs" to view all songs on the iPod.
- **3.** Select the song from the list to begin playback.

Genres

Use the following steps to navigate genres:

- **1.** Press to view the genres on the iPod.
- 2. Select a genre name to view a list of artists of that
- 3. Select an artist to view albums or "All Albums" to view all albums of that genre.
- 4. Select "Artist" to view albums.
- **5.** Select "Album" to view songs.
- **6.** Select the song from the list to begin playback.

Podcasts

Use the following steps to navigate podcasts:

- 1. Press to view the podcasts on the iPod.
- 2. Select a podcast name to begin playback.

Songs

Use the following steps to navigate songs:

- 1. Press to view a list of all songs on the iPod.
- **2.** Select the song from the list to begin playback.

Composers

Use the following steps to navigate composers:

1. Press to view the composers on the iPod.

- 2. Select the composer to view a list of songs by that composer.
- Select a song from the list to begin playback.

Audio Books

Use the following steps to navigate audio books:

- Press to view the audio books on the iPod.
- 2. Select the audio book from the list to begin playback.

When an iPhone or iPod Touch with iOS lower than iOS 5.0 is connected through USB or Bluetooth, the audio may not be heard when the iPod source is selected. To correct this situation, select either the dock connector in the phone or disconnect and reconnect the Apple device.

Note: iOS is the Apple Operative System.

Use the following controls to play the iPod:

PREV (**Previous**) – Press to seek to the beginning of the current or previous track.

Note: If the track has been playing for less than 10 seconds, the radio will seek for the previous track. If the track has been playing longer than 10 seconds, the current track starts from the beginning.

NEXT (Next) – Press to seek to the next track.

FF/FR (Fast Forward/Fast Reverse) – To fast forward or reverse through a track, press and hold Next or PREV button.

RDM (Random) – Press to play the tracks randomly. Press again to stop shuffle mode. Look for the RDM icon to turn on in the radio display.

RPT (Repeat) – Press to repeat current track. Press again to stop repeat. Look for the RPT icon to turn on in the radio display.

Error Messages - If an "UNSUPPORTED" message is displayed, the message could be for one of the following reasons:

- When, the iPod connected is not supported. Refer to the "iPod (If Supported), and iPod" section for a list of supported models
- The iPod does not respond to the radio commands, in this case reset the iPod, and try again the connection

If a "NO MUSIC" message is displayed, the message could be for one of the following reasons:

There are not any playable files in the iPod.

USB (If Supported)

Playing from a USB

A USB mass storage device can be connected to the USB port to listen to music files on the USB mass storage device.

Note: The USB port is in the front of the radio.

5 volts DC power is limited to 2.1 amps from this USB port.

Note: Some models are limited to 1 amp.

USB MP3 Player and USB

Drives

Any USB MP3 player or USB drive connected to the radio must comply with the following USB storage specifications:

- MS-Dos partition only.
- Class specification (USB MSC) and supports formats of FAT32, FAT16, NTFS, and HFS+.
- Hard disk drives may be played, but hard disk drives are not supported.
- The radio will not be able to play back writeprotected music.
- MTP players are not supported.
- USB 3.0 devices are supported however cannot be guaranteed for media playback (unless backwards compatibility is supported by device)

The following guidelines must be met when creating MP3 files, otherwise the files might not play:

For MP3 Files

- Bit rates: 32, 40, 48, 56, 64, 80, 96, 112, 124, 160, 192, 224, 256, 320 kbps for MPEG-1 Audio Layer 3.
- Sampling frequencies: 32, 44.1 and 48 kHz for MPEG-1 Audio Layer 3.
- Maximum number of folders: Eight folders with 255 files per folder.
- M3u and pls playlist versions supported.

For Unprotected WMA Files

- Versions: 1, 2, 7, 8, 9 and 9.1.
- Bit rates: 32 320 kbps.

Sampling frequencies: 32 - 48 kHz.

Playing a USB Device

Use the following steps to navigate and play a USB device:

Radio

- 1. Connect the USB and the USB begins to play.
- Radio will start playing the USB and will show the track number, Song, Artist, Elapsed Time, and Album information when available.
- Media playback is limited to the first song available on the connected USB source while the USB device is building the media browse list.

Note: Pressing "PREV" or "NEXT" during the browse list update will restart playback of current song.

Front Auxiliary

In "Front Auxiliary" mode, the user can play an external device such as an iPod or MP3 player via the auxiliary input jack on the front of the radio.

To use an external device, simply connect the device via the auxiliary input jack.

"Front Auxiliary" mode will not be available if no device is connected to the auxiliary input jack on the front of the receiver.

Rear Auxiliary

In "Rear Auxiliary" mode, the user can play an external device that the user has connected via the rear power auxiliary input lines of the radio.

To use an external device, simply connect the device via the auxiliary input jack and select the device using the "SCR" button.

Note: Rear Aux sources will be available even when no device is attached to the rear inputs or current application.

Bluetooth (If Supported)

The radio can connect to a Bluetooth (BT) Device. To use this functionality the device requires Bluetooth and to be paired and connected to the radio.

The user can connect up to 10 devices to the radio. The radio will connect to the first available paired device, starting from the last paired/connected device.

The Bluetooth Menu is available when the phone button is pressed. To navigate through the Bluetooth Menu, rotate the volume knob.

The Bluetooth Menu consists of the following options:

BT ENABLE

- CONNECT PHONE
- DISCONNECT PH
- ADD PHONE
- DELETE PHONE
- BT PROFILES

Note: Some options are only available when a device has been paired previously.

Enabling/Disabling Bluetooth

To Enable/Disable Bluetooth in the Radio (if Bluetooth is not already activated):

- Press the Phone button while the Radio is ON. The Bluetooth Menu will be shown.
- 2. Rotate the volume knob until the display shows: "BT Disable" or "BT Enable".
- **3.** Press the volume knob to "Enable" or "Disable" the Bluetooth.

When BT devices were previously paired, the phone icon will be active and the arrow icons will blink until the reconnection of the previously paired phones is attempted (each phone reconnection will be attempted three times).

Pairing a Bluetooth Device

To complete pairing, the following steps must be followed:

- Enable Bluetooth on the radio and on the device. Refer to the device manual for more information.
- 2. Pair the BT device to the radio
- **3.** Rotate the volume knob until the display shows, "ADD PHONE".
- 4. Press the volume knob to confirm the action. The radio will display "ADDING PH" for 3 seconds. In this discoverable mode, the Bluetooth status icon will blink for up to 3 minutes. If no phone was found, the radio will display "NO PH FOUND" and the phone and arrows icons will be disabled.
- **5.** During the discoverable mode set the cell phone to add a Bluetooth device and look for the name "DEA700"
- 6. Follow the instructions on your phone to add a connection. When necessary, use the 4-number PIN 0000 to connect to the radio.

When the cell phone has been successfully added, the radio will display "PH CONNECTED" and then the name of the Bluetooth device. The Phone Icon will be active on the display, arrows will be disabled.

When the radio connects, the Bluetooth icon will blink. The blinking icon signifies that the receiver is attempting to download "CONTACTS" of the cell phone (for the "DIAL CONTACTS" function). The icon will cease to blink if all contacts have been downloaded or if the radio times out from receiving contacts from the cellular phone. See the phone user guide for more information.

Note: While in pairing mode, changing the "Source" will cancel this process. The source can be changed from the "SRC" button on the radio or from external controls (steering wheel or rear seat audio control).

Connecting a Bluetooth Device

If the device was previously paired, simply connect to the device:

- Press the "Phone" button. The Bluetooth Menu will be shown
- 2. Rotate the volume knob until the display shows "CONNECT PH".
- Press the knob to confirm the action.
- 4. Select the desired BT device (rotate the knob and confirm by pressing the knob). The radio will show "CONNECTING" for 3 seconds.

When the radio connects, the radio will display "PH CONNECTED" and the name of the device, the Bluetooth icon will blink. The blinking BT icon signifies that the radio is attempting to download the "Contacts" of the device (for the DIAL CONTACTS function). The icon will cease to blink if all contacts have been downloaded or if the radio times out from receiving contacts from the cell phone device. Phone Icon will be active on the display.

Dual Phones

This feature gives you the ability to have two connected Bluetooth devices paired to the radio at the same time. One as a phone and another as the Bluetooth media device. To use this feature, the two BT devices must be in range of the radio to be paired. Use "Manual" selection of the BT devices in the phone menu to connect the desired phone on the proper profile (Phone or Audio).

Disconnecting a Device

If the BT device is connected and the user requires disconnecting the device from the radio, perform the following steps.

- Press the Phone button. The Bluetooth Menu will be shown.
- 2. Rotate the volume knob until the display shows "DISCONNECT PH".
- 3. Press the volume knob to confirm the action.

The radio will show "DISCONNECT PH" for a short time. Once the phone is disconnected, the radio will display "DISCONNECTED" and then the Bluetooth device name. The phone Icon will be inactive.

Deleting One or All Devices

To delete from the radio one or all BT devices previously paired:

- Press the phone button. The Bluetooth Menu will be shown.
- 2. Rotate the volume knob until the display shows "DELETE PH".
- **3.** Press the volume knob to enter the submenu. The radio will show a list of BT device names. Scroll through by rotating the volume knob.
- **4.** Select the BT device to be deleted or select "DELETE ALL" to erase all the paired devices in the list by pressing the volume knob. The radio will show "PH DELETED".

Voice recognition (If Supported)

If a BT device supports voice recognition, an option is made visible in the Bluetooth menu to be activated. To use voice recognition, it is necessary to ensure that the option is active in the connected Bluetooth device. While attempting to use voice recognition, there can be a delay of 1 to 2 seconds to start the session due to device delay.

Note: Android device behavior is different from Apple in how the voice recognition status is reported. This behavior can result in the option present in the phone menu, however voice recognition might not function when selected.

Hands Free/ Bluetooth Features

Once the device is properly paired (refer to "Pairing a Bluetooth Device, and Bluetooth") and connected (refer to "Connecting a Bluetooth Device, and Bluetooth"), the radio supports the following "Hands Free" features if the connected device has "Hands Free" capability.

Dial Menu

The radio can retrieve the last calls and contact information from the device (Hands Free profile must be available in the device and sometimes the action must be accepted by the user).

The dial menu is accessed when the device is not in a call and the phone button is long pressed.

Dial Redial

The user can retrieve the last phone number called and call that phone number. Press and hold the phone button and the last phone number called will be dialed.

Favorites

The radio can store six phone numbers. To save a phone number, the user can select the contact using either the "DIAL CONTACTS" feature or the "LAST CALLS" feature. When the phone number of the desired contact is displayed, press the volume knob and select the option "ADD TO FAV". The phone number will be saved in "Favorites" list.

To dial a saved phone number in favorite List, select "FAVORITES" from the dial menu and rotate the volume knob to select the number. Press the volume knob and select "DIAL" to call to the saved phone number.

To delete numbers, simply repeat the last process with the desired phone number and select "DEL FAV"

Dial Contact

The radio is able to read and display cell phone contacts. Press the phone button to show the "DIAL MENU" and rotate the volume knob until "DIAL CONTACTS" is shown, press the volume knob to select this feature. Rotate the knob to select between the different stored contacts (up to 500 number from the phone and 250 contacts from the SIM). Press the "OK" button if you want to dial to the listed contact.

The radio will download the following phone numbers from each contact (if available): "HOME", "WORK", "MOBILE", "OTHER", and "PREFERRED". Within the dial menu, the contact will be displayed as either: "H", "W", "M", "O", or "P" plus the 10-digit number (XXXXXXXXXXX).

When the transfer is successful, the radio will show the "DIAL CONTACTS" submenu. Each time the radio connects to the phone, the "DIAL CONTACTS" submenu is updated, so the user may need to repeat this manual operation as needed.

Last Calls

The radio can list the last 10 calls ("DIALED", "RECEIVED" AND "MISSED"). Rotating the volume knob will navigate the user through the selected call list. Press the "OK" button to call.

Note: This function will only be shown if the cell phone supports this feature.

Call Options

The following options are available during a "Hands Free" call.

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Accepting a Call

When an incoming call is received, the radio will play the in-band ringtone if the device supports this feature, otherwise a default ringtone will be played. The user can adjust the volume of the ringtone while the ringtone is played. Any volume lower than 13, will not be considered for the next incoming call. Volume above 13 will be stored for the next call.

When an incoming call is received, the radio will display the name (if available) and number of the caller. To accept the call, press any of the following radio buttons:

- Phone
- Volume Knob
- NEXT

Rejecting a Call

When an incoming call is received, the radio will display the name (if available) and number of the caller. To reject the call, press any of the following radio buttons:

- ESC
- PREV

Ending a Call

When a Hands Free call is in progress, the radio will display the number of the caller and the elapsed time. To end a call, press any of the following radio buttons:

- Phone
- ESC
- PREV

Microphone Mute

When a "Hands Free" call is in progress, pressing Pause/Play (Preset 2) will mute the radio microphone. Press again to deactivate mute.

Call Transfer

If a call is in progress, press the radio "Phone" button for more than 3 seconds to transfer the call to the cell phone for private conversations. Repeat this process to return into Hands Free mode again.

Note: Some devices will disconnect Bluetooth when a transfer is performed.

BT Audio

Bluetooth Player

If the connected BT device supports this feature, the device can be used as an audio source input to the radio, allowing the user to enjoy the music files stored on the phone.

This feature should be used with the device default player. Functionality cannot be warranted, when a third-party player is used in the connected device. The radio can be out of synchrony if the user alters or command the player within the phone.

To access music files on the phone, press the "SRC" button and select "BT AUDIO".

In "BT AUDIO" the user can use the following radio buttons (if the device supports the funtions):

- Play
- Pause
- NEXT
- PREV
- Fast Forward
- Fast Reverse
- Repeat
- Random

Note: This function will only be shown if the cell phone supports this feature.

Note: Function may differ depending on the phone.

Play/Pause

Press to play the current track. Press again to pause the audio.

Note: Some phones will make the radio display "BT AUDIO PAUSE" while audio is available. This display is normal on phones that do not have full compatibility with this radio Bluetooth remote control commands.

PREV (Previous)

Press to seek to the beginning of the current or previous track.

If the track has been playing for less than 10 seconds, the radio seeks to the previous track. If the track has been playing longer than 10 seconds, the current track starts from the beginning.

NEXT(Next)

Press to seek to the next track.

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Operation Section
Radio

FF/FR (Fast Forward/Fast Reverse)

To fast forward or reverse through a track, press and hold "NEXT" or "PREV" button.

RDM (Random)

Press to play the tracks randomly. Press again to stop shuffle mode. RDM Icon will be turned ON or OFF when the feature is enabled or disabled.

RPT (Repeat)

Press to repeat current track. Press again to stop repeat. "RPT" icon will be turned ON or OFF when the feature is enabled or disabled.

Audio Profile Version Supported

The "Premium Corporate Radio" shall support AVRCP 1.5.

Bluetooth Link-loss

If connected, a BT device is outside of the range (10 m or 33 ft) of the radio, the device will disconnect from system. Device reconnection will occur when the device is back in range of radio.

Bluetooth Reconnection

Upon first starting the vehicle, the previously connected cellular phone (favorite) shall be reconnected on both the phone and Bluetooth audio profiles.

Clock Setup

To adjust the time in the radio, press the volume knob for more than 2 seconds. Rotate the volume knob to select "CLOCK SETUP" from the scrolling list. Press the volume knob to show the submenus: "FORMAT", "SET TIME", and C "LOCK VISIBLE". Rotate the volume knob to select the desired submenu and press the volume knob to confirm.

Format – Select 12-hour or 24-hour format by rotating the volume knob and pressing the volume knob to confirm.

Set Time – The hour digits will begin to blink. The format will be the same as the current clock selection (12- or 24-hour format). Change the hour by rotating the volume knob and confirm the hour by pressing the volume knob. Then the minute digits will begin to blink, change, and confirm your selection by pressing the volume knob.

Clock Visible – Select "YES" or "NO" by rotating the volume knob to select if the clock is visible on the display of the radio. Press the volume knob to confirm.

Alarm Setup

To set the alarm press, press the volume knob for more than 2 seconds to select the "ALARM SETUP" from the scrolling list and press the volume knob to enter the Alarm setup menu.

Once in the "Alarm Setup" menu, change the alarm ON or OFF by rotating the volume knob and pressing the volume knob to confirm your selection. When you select "ALARM ON", the alarm icon will be set to ON and the following configuration options will be shown:

SET TONE OR SET MUSIC: – Change between "SET TONE" or "SET MUSIC" by rotating the volume knob and pressing the volume knob to conform your selection.

Volume – When "TONE" is selected, the volume can be changed between "LOW", "MID", and "HIGH" by rotating the volume knob and pressing the volume knob to confirm your selection. When "MUSIC" is selected, you can adjust the volume from 0 to 30 by rotating the volume knob and pressing the volume knob to confirm your selection.

Note: No sound will be heard while setting up the tone volume.

TURNING THE ALARM OFF – When the alarm is triggered, to cancel the alarm, short press the "ESC" button. If you do not turn off the alarm, the alarm will automatically shut off after 15 minutes and enter a "snooze" cycle for 9 minutes then sound again. This cycle will repeat three times if you do not turn off the alarm each time the alarm is triggered. 63 minutes in total (15 minute sound cycle, 9 minute snooze cycle, 15 minute sound cycle, 9 minute snooze cycle, 15 minute sounding cycle).

ACTIVATING SNOOZE: – To "snooze" the alarm, press any button (except the "ESC" button) for less than 2 seconds when the alarm sounds. "SNOOZE" will appear for 3 seconds and the alarm will be postponed for 9 minutes before sounding again.

Note: If the "ALARM SETUP" Menu is accessed after a change to the clock time format without first exiting the setting adjustments menus, the alarm time format will not be accurately reflected. Exit setting adjustments menus after making time format changes then reenter the alarm setup menu to prevent improper time entries.

Dimming

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Press the volume knob for more than 2 seconds to access the "DIMMING" menu from the scrolling list of setting adjustments menus. Press the volume knob again to enter the dimming menu. When the vehicle uses dimming by CAN or analog configuration, the display will show "DIMMING" 0. This value can be adjusted from -10 to +10. If the vehicle does not use dimming by CAN or analog configuration, the display will show "DIMMING" and the current selected level from 0 to 30. Rotate the volume knob clockwise to increase the dimming and counterclockwise to decrease the dimming. Press the volume knob to confirm your dimming level selection.

Refresh List (DAB Radio Only)

Press volume knob for more than 2 seconds to select the "RADIO SETUP" menu from the scrolling list of setting adjustments menus. Once selected, press the volume knob to show the submenus: "REGIONAL", "TRAFFIC ANNCM", "DAB ANNCMNTS", "DAB ANNCMNTS CAT", and "ALT FRQ".

Radio Setup (DAB Radio Only)

Press the volume knob for more than 2 seconds to select the "RADIO SETUP" menu from the scrolling list of setting adjustments menus. Once selected, press the volume knob to show the submenus: "REGIONAL", "TRAFFIC ANNCM", "DAB ANNCMNTS", "DAB ANNCMNTS CAT", and "ALT FRQ".

Regional

The display will show ON or OFF depending on the current selection. Rotate volume knob to change between the two options and press the volume knob to confirm the selection. This option is only available in DAB Mode.

Traffic ANNCM ("Traffic Announcements" (TA))

The display will show "ON" or "OFF" depending on the current selection. Rotate volume knob to change between the two options and press the volume knob to confirm the selection. If TA is enabled, the radio shows an icon in the display. This option is only available in radios with DAB radios only.

DAB ANNCMNTS (DAB Announcements)

The display will show "ON" or "OFF" depending on the current selection. Rotate volume knob to change between the two options and press the volume knob to confirm the selection. This option is only available in DAB Radios only.

DAB ANNCMNTS CAT (DAB Announcement Categories)

The display will show you the announcement categories available and the current selection. Rotate volume knob to scroll through the available options:

- Weather
- Event
- Finance
- News
- RAD Info
- Special
- Sports
- Travel
- Warning

Select the category you would like to receive alerts from and press the volume knob to confirm selection. (DAB radios only).

ALT FRQ (Alternative Frequencies (AF))

The display will show "ON" or "OFF" depending on the current selection. Rotate volume knob to change between the two options and press the volume knob to confirm the selection. If AF is enabled, the radio shows an icon in the display. This option is only available in radios with DAB function.

DAB STATION LIST (DAB Radio Only)

Press volume knob for more than 2 seconds to access the "DAB CHANNEL LIST" menu. Rotating the volume knob will allow you to scroll through all the available DAB channels. This menu is for visibility to available stations only, no setting selections are offered. (DAB radios only)

Additional setting adjustment menus when radio is in AM/FM/LW Source (SRC) Mode:

SEEK SENSITIVITY (SEEK SEN) – Press the volume knob for more than 2 seconds to access the "SEEK SENSITIVITY" menu. The display will show the current level from -6 to +6. Rotate the volume knob clockwise to increase the sensitivity value and counterclockwise to decrease the sensitivity value. Press the volume knob to select the desired option. This Menu is only available when radio is playing in "Tuner" mode.

TUNE CONFIGURATION (TUNE CONFIG) – Press the volume knob for more than 2 seconds to access the "TUNE CONFIG" menu. The display will show "TUNE" and the current selected option "Auto" or "Manual". Rotate the volume knob to change

between "AUTO" and "MANUAL". Press the volume knob to select the desired option. This menu is only available when radio is playing in "Tuner" mode.

Additional setting adjustment menus when radio is in SXM Source (SRC) Mode (if supported):

CATEGORY ENABLE/DISABLE (CAT E/D) -

– Press the volume knob for more than 2 seconds to access the "CAT E/D" menu. The display will show "CAT ENABLE" or "CAT DISABLe" depending on the current selection. Rotate the volume knob to change between the two options. Press the volume knob to confirm your selection. This menu is only available in SXM Mode.

TUNE START – Press volume knob for more than 2 seconds to access the "Tune Start" menu. The display will show "ENABLE" or "DISABLE" depending on the current selection. Rotate volume knob to change between the two options. Press the volume knob to confirm your selection. This menu is only available in SXM Mode.

Audio Players

Music Navigation USB

Press the magnifying glass (preset 1) button while USB source is active to access the USB "Music" menu.

Use the volume knob or "Next/Prev" button to navigate through the different options.

Special Considerations

Root Directory

The root directory is treated as a folder. All files contained directly under the root directory are accessed prior to any root directory folders.

Empty Folders

If a root directory or folder is empty or contains only folders, the player advances to the next folder in the file structure that contains a compressed audio file. The empty folder or folders are not displayed or numbered.

Optional Equipment

Fuse

The Radio fuse is in the fuse box of the vehicle. The optimal fuse values are between 10A and 15A.

Clock Back-Up (If Supported)

The radio will be able to keep the clock running when the battery of the vehicle is disconnected for at least 30 days.

Tips and Troubleshooting Chart

Radio

Unable to tune stations

Radio is in a weak signal area.

Increase the "Seek Sensitivity". Refer to the "Seeking a Station" section for more information.

iPod

iPod Does Not Play or There is No Sound

The iPod has not been recognized.

Verify that the iPod is supported.

If the iPod is supported, reset the iPod and reconnect again. Refer to the "iPod (If Supported), and iPod" section for more information.

iPod Not Functioning

Out of the operation range, Operation temperature of the iPod player is -20° to 85°C (-4°F to 185).

Allow the interior of the vehicle temperature to be in human supportable range.

The Apple interface cable may be damaged or a nonauthentic Apple product therefore unsupported.

While using a device with a charging case, charging or media playback cannot be guaranteed.

Bluetooth

Radio does not Recognize the Bluetooth Enabled Device

Try one of the following actions:

- Remove the device, after that pair and connect the device. Refer to "Deleting One or All Devices", "Pairing a Bluetooth Device, and Bluetooth", and "Connecting a Bluetooth Device, and Bluetooth" sections for more information.
- · Make sure that the device is turned on.
- Make sure that the Bluetooth adapter on the radio is enabled, Refer to the "Enabling/Disabling Bluetooth, and Bluetooth" section for more information.
- The device might be out of range. Try moving the device closer.

Operation Section Radio

Bluetooth Device and the Radio Cannot Communicate

Try one of the following actions:

- Make sure that the user selected the correct device to be connected to. For example, the user might have two or more devices previously paired or connected, so make sure that the user selected the right device.
- Some devices require a passkey before the device can be connected to the radio.
- Probably an incorrect passkey was typed or the time limit expired for typing the passkey. Refer to the "Connecting a Bluetooth Device, and Bluetooth" section for more information.
- If the device is close to other devices that use radio frequencies. such as microwave ovens, cordless phones, remote controls for electronics or lighting, or 802.11 wireless networks. Those devices might be creating interference. Try moving the device that is not working farther away from the other devices.

Bluetooth Device Music Cannot Be Heard

Verify that the device is paired and connected. Refer to the "Pairing a Bluetooth Device, and Bluetooth" and "Connecting a Bluetooth Device, and Bluetooth" sections for more information.

Make sure that "BT AUDIO SRC" is selected in the source list menu. Refer to the "SRC (Source/Power)" section for more information.

Adjust the volume on the radio by rotating the volume knob.

Verify that the Bluetooth device is not paused.

Make sure that the Bluetooth device has music files.

In the event you have connected a phone to AUX, the device controls the audio behavior so this connection may require disconnection of AUX from the device to recover audio.

Rear Seat Audio (RSA) (If Supported)

The RSA shows no link. The radio requires up to 15 seconds to wake up. If the user wakes up the radio using the RSA and the radio is in sleep mode, the RSA will show "no-link" while the radio starts. The communication shall be reestablished after this time lapse expires.

Trademarks and License Agreements



Illustration 7

g06229251

"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to the iPod or iPhone and has been certified by the developer to meet Apple performance standards.

iPod, iPodTouch, and iPhone are trademarks of Apple Computer, Inc., registered in the U.S. and other countries.

SiriusXM



Illustration 8

q06229256

"SiriusXM" means that the radio has been designed and certified to meet SiriusXM standards.

SiriusXM is a trademark of SiriusXM Company registered in the U.S.

DAB



Illustration 9 g06485471

"DAB" means the radio has been designed to support digital audio broadcasting, which provides an enhanced sound fidelity, improved reception and new data services.

Bluetooth

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Precautions

Product Cleaning

Use a soft dry cloth for periodic cleaning. for more severe stains, dampen the cloth with water only. Anything else might affect the appearance or damage the lens or plastics.

Bluetooth Distraction

When using a cell phone, it can be distracting to look too long or too often at the screen of the phone or the infotainment system. Taking your eyes off the road too long or too often could cause a crash resulting in injury or death.

Focus your attention on driving.

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Product and Dealer Information

Delivery Date: _____

Note: For product identification plate locations, see the section "Product Identification Information" in the Operation and Maintenance Manual.

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Produc	et Information				
Model:					
Product Ide	ntification Number:				
Engine Seri	al Number:				
Transmissio	on Serial Number:				
Generator S	Serial Number:				
Attachment	Serial Numbers:				
Attachment	Information:				
Customer E	quipment Number:				
Dealer Equ	pment Number:				
Dealer	Information				
Name:	Branch:				
Address:					
	Dealer Contact	Phone Number	<u>Hours</u>		
Sales: -					
Parts: -					
Service: -					

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