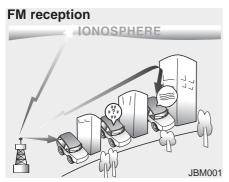
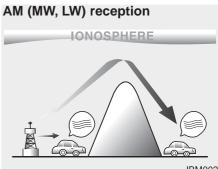
How vehicle audio works



AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your vehicle. This signal is then received by the radio and sent to your vehicle speakers.

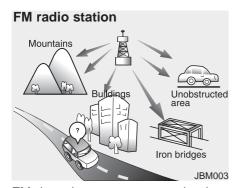
When a strong radio signal has reached your vehicle, the precise engineering of your audio system ensures the best possible quality reproduction. However, in some cases the signal coming to your vehicle may not be strong and clear.

This can be due to factors, such as the distance from the radio station. closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area

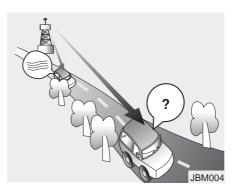


JBM002

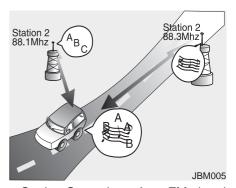
AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long, low frequency radio waves can follow the curvature of the earth rather than travelling straight out into the atmosphere. In addition, they curve around obstructions so that they can provide better signal coverage.



FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade at short distances from the station. Also, FM signals are easily affected by buildings, mountains, or other obstructions. These can result in certain listening conditions which might lead you to believe a problem exists with your radio. The following conditions are normal and do not indicate radio trouble:



- Fading As your vehicle moves away from the radio station, the signal will weaken and sound will begin to fade. When this occurs, we suggest that you select another stronger station.
- Flutter/Static Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.



- Station Swapping As a FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.
- Multi-Path Cancellation Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

Using a cellular phone or a twoway radio

When a cellular phone is used inside the vehicle, noise may be produced from the audio system. This does not mean that something is wrong with the audio equipment. In such a case, use the cellular phone at a place as far as possible from the audio equipment.

A CAUTION

When using a communication system such as a cellular phone or a radio set inside the vehicle, a separate external antenna must be fitted. When a cellular phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.

WARNING

Do not use a cellular phone while driving. Stop at a safe location to use a cellular phone.

Caring for disc

- If the temperature inside the car is too high, open the car windows to ventilate before using the system.
- It is illegal to copy and use MP3/WMA files without permission. Use CDs that are created only by lawful means.
- Do not apply volatile agents, such as benzene and thinner, normal cleaners and magnetic sprays made for analogue disc onto CDs.
- To prevent the disc surface from getting damaged, hold CDs by the edges or the center hole only.
- Clean the disc surface with a piece of soft cloth before playback (wipe it from the center to the outside edge).
- Do not damage the disc surface or attach pieces of sticky tape or paper.
- Make certain only CDs are inserted into the CD player (Do not insert more than one CD at a time).
- Keep CDs in their cases after use to protect them from scratches or dirt.

Depending on the type of CD-R/CD-RW CDs, certain CDs may not operate normally according to manufacturing companies or making and recording methods. In such circumstances, continued use may cause malfunctions to your audio system.

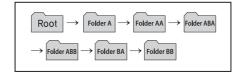
* NOTICE - Playing an Incompatible Copy Protected Audio CD

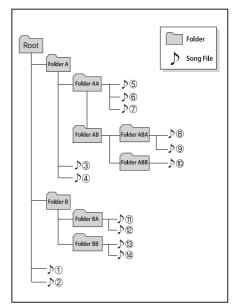
Some copy protected CDs, which do not comply with international audio CD standards (Red Book), may not play on your car audio. Please note that inabilities to properly play a copy protected CD may indicate that the CD is defective, not the CD player.

NOTE:

Order of playing files (folders):

- 1. Song playing order : ① to @ sequentially.
- 2. Folder playing order:
- * If no song file is contained in the folder, that folder is not displayed.





WARNING

- Do not stare at the screen while driving. Staring at the screen for prolonged periods of time could lead to traffic accidents
- Do not disassemble, assemble, or modify the audio system. Such acts could result in accidents, fire, or electric shock.
- Using the phone while driving may lead to a lack of attention of traffic conditions and increase the likelihood of accidents. Use the phone feature after parking the vehicle.
- Heed caution not to spill water or introduce foreign objects into the device. Such acts could lead to smoke, fire, or product malfunction.

(Continued)

(Continued)

- Please refrain from use if the screen is blank or no sound can be heard as these signs may indicate product malfunction. Continued use in such conditions could lead to accidents(fires, electric shock) or product malfunctions.
- Do not touch the antenna during thunder or lightening as such acts may lead to lightning induced electric shock.
- Do not stop or park in parking-restricted areas to operate the product. Such acts could lead to traffic accidents
- Use the system with the vehicle ignition turned Prolonged use with the ignition turned off could result in battery discharge.

A CAUTION

- Operating the device while driving could lead to accidents due to a lack of attention to external surroundings. First park the vehicle before operating the device.
- Adjust the volume to levels that allow the driver to hear sounds from outside of the vehicle. Driving in a state where external sounds cannot be heard may lead to accidents
- Pav attention to the volume setting when turning the device on. A sudden output of extreme volume upon turnina the device on could lead to hearing impairment, (Adiust the volume to a suitable levels before turning off the device.)

(Continued)

- If you want to change the position of device installation. please inquire with your place of purchase or service maintecenter. Technical nance expertise is required to install or disassemble the device.
- Turn on the car ignition before using this device. Do not operate the audio system for long periods of time with the ignition turned off as such operations may lead to battery discharge.
- Do not subject the device to severe shock or impact. Direct pressure onto the front side of the monitor may cause damage to the LCD or touch screen.

(Continued)

- When cleaning the device, make sure to turn off the device and use a dry and smooth cloth. Never use tough materials, chemical cloths, or solvents (alcohol, benzene, thinners, etc.) as such materials may damage the device panel or cause color/quality deterioration
- · Do not place beverages close to the audio system. Spilling beverages may lead to system malfunction.
- In case of product malfunction, please contact your place of purchase or After Service center
- Placing the audio system within an electromagnetic environment may result in noise interference.

* NOTICE - USING THE USB DEVICE

- To use an external USB device, make sure the device is not connected when starting up the vehicle. Connect the device after starting up.
- If you start the engine when the USB device is connected, it may damage the USB device. (USB flashdrives are very sensitive to electric shock.)
- If the engine is started up or turned off while the external USB device is connected, the external USB device may not work.
- The System may not play inauthentic MP3 or WMA files.
 - 1) It can only play MP3 files with the compression rate between 8Kbps ~ 320Kbps.
 - 2) It can only play WMA music files with the compression rate between 8Kbps ~ 320Kbps.
- Take precautions for static electricity when connecting or disconnecting the external USB device.
- An encrypted MP3 PLAYER is not recognizable.

(Continued)

(Continued)

- Depending on the condition of the external USB device, the connected external USB device can be unrecognizable.
- When the formatted byte/sector setting of External USB device is not either 512BYTE or 2048BYTE, then the device will not be recognized.
- Use only a USB device formatted to FAT 12/16/32.
- USB devices without USB I/F authentication may not be recognizable.
- Make sure the USB connection terminal does not come in contact with the human body or other objects.
- If you repeatedly connect or disconnect the USB device in a short period of time, it may break the device.
- You may hear a strange noise when connecting or disconnecting a USB device.

(Continued)

(Continued)

- If you disconnect the external USB device during playback in USB mode, the external USB device can be damaged or may malfunction. Therefore, disconnect the external USB device when the audio is turned off or in another mode. (e.g, Radio, CD)
- Depending on the type and capacity of the external USB device or the type of the files stored in the device, there is a difference in the time taken for recognition of the device.
- Do not use the USB device for purposes other than playing music files.
- Playing videos through the USB is not supported.
- Use of USB accessories such as rechargers or heaters using USB I/F may lower performance or cause trouble.

(Continued)

- If you use devices such as a USB hub purchased separately, the vehicle's audio system may not recognize the USB device. In that case, connect the USB device directly to the multimedia terminal of the vehicle.
- If the USB device is divided by logical drives, only the music files on the highest-priority drive are recognized by car audio.
- Devices such as MP3 Player/ Cellular phone/Digital camera can be unrecognizable by standard USB I/F can be unrecognizable.
- Charging through the USB may not be supported in some mobile devices.
- USB HDD or USB types liable to connection failures due to vehicle vibrations are not supported. (istick type)
- Some non-standard USB devices (METAL COVER TYPE USB) can be unrecognizable.

(Continued)

(Continued)

- Some USB flash memory readers (such as CF, SD, micro SD, etc.) or external-HDD type devices can be unrecognizable.
- Music files protected by DRM (DIGITAL RIGHTS MANAGE-MENT) are not recognizable.
- The data in the USB memory may be lost while using this audio. Always back up important data on a personal storage device.
- Please avoid using USB memory products which can be used as key chains or cellular phone accessories as



they could cause damage to the USB jack. Please make certain only to use plug type connector products.

* NOTICE - USING THE iPod® DEVICE

- Some iPod models may not support communication protocol and files may not properly play.
 Supported iPod models:
 - iPhone 3GS/4
 - iPod touch 1st~4th generation
 - iPod nano 1st~6th generation
 - iPod classic
- The order of search or playback of songs in the iPod can be different from the order searched in the audio system.
- If the iPod disabled due to its own malfunction, reset the iPod. (Reset: Refer to iPod manual)
- An iPod may not operate normally on low battery.

(Continued)

(Continued)

- Some iPod devices, such as the iPhone, can be connected through the Bluetooth® Wireless Technology interface. The device must have audio Bluetooth® Wireless Technology capability (such as for stereo headphone Bluetooth® Wireless Technology). The device can play, but it will not be controlled by the audio system.
- To use iPod features within the audio, use the cable provided upon purchasing an iPod device.
- Skipping or improper operation may occur depending on the characteristics of your iPod/Phone device.
- If your iPhone is connected to both the *Bluetooth*® Wireless Technology and USB, the sound may not be properly played. In your iPhone, select the Dock connector or *Bluetooth*® Wireless Technology to change the sound output (source).

(Continued)

- When connecting iPod with the iPod Power Cable, insert the connector to the multimedia socket completely. If not inserted completely, communications between iPod and audio may be interrupted.
- When adjusting the sound effects of the iPod and the audio system, the sound effects of both devices will overlap and might reduce or distort the quality of the sound.
- Deactivate (turn off) the equalizer function of an iPod when adjusting the audio system's volume, and turn off the equalizer of the audio system when using the equalizer of an iPod.
- When not using iPod with car audio, detach the iPod cable from iPod. Otherwise, iPod may remain in accessory mode, and may not work properly.

■ CD Player (for RDS model) :



* No Bluetooth logo will be shown if the Bluetooth® Wireless Technology feature is not supported.

SYSTEM CONTROLLERS AND FUNCTIONS

* Display and settings may differ depending on the selected audio.

Audio Head Unit (for RDS model)



- 1. (EJECT)
- Ejects the disc.

2. RADIO

- Changes to FM/AM mode.
- Each time the key is pressed, the mode is changed in order of FM1 → FM2 → FMA → AM → AMA.
- * In Setup>Display, the radio pop up screen will be displayed when [Mode Pop up] is turned On.

 When the pop up screen is displayed, use the TUNE knob or keys 1 ~ 6 to select the desired mode.

3. MEDIA

- Changes to CD, USB(iPod), AUX, My Music, BT Audio mode.
- Each time the key is pressed, the mode is changed in order of CD, USB(iPod), AUX, My Music, BT Audio.
- * In Setup>Display, the media pop up screen will be displayed when [Mode Pop up] is turned On . When the pop up screen is displayed, use the TUNE knob or keys 1 ~ 6 to select the desired mode.

- 4. PHONE (for *Bluetooth*® Wireless Technology equipped model)
- Operates Phone Screen
- * When a phone is not connected, the connection screen is displayed.

5. PWR/VOL knob

- Power Knob: Turns power On/Off by pressing the knob
- Volume Knob: Sets volume by turning the knob left/right



6. SEEK A

- Radio Mode: Automatically searches for broadcast frequencies.
- CD, USB, iPod, My Music modes
 - Shortly press the key (under 0.8 seconds): Moves to next or previous song (file)
 - Press and hold the key (over 0.8 seconds): Rewinds or fast-forwards the current song.

7. V PTY A

- FM : RDS Program Type Search
- CD MP3, USB mode : Folder Search

8. 1 ~ 6 (Preset)

- Radio Mode: Saves frequencies (channels) or receives saved frequencies (channels)
- CD, USB, iPod, My Music mode
- 1 RPT : Repeat
- 2 RDM : Random
- In the Radio, Media, Setup, and Menu pop up screen, the number menu is selected.

9.

- Each time the button is shortly pressed (under 0.8 seconds), sets screen Off → Screen On → Screen Off
- * Audio operation is maintained and only the screen will be turned Off. In the screen Off state, press any key to turn the screen On again.

10. TA/SCAN

- Radio Mode
- Press and hold the key (over 0.8 seconds): Previews each broadcast for 5 seconds each
- CD, USB, My Music mode
- Press and hold the key (over 0.8 seconds): Previews each song (file) for 10 seconds each
- * Press the key again to continue listening to the current song (file).

11. SETUP

 Moves to the Display, Sound, Phone and System setting mode.

12. MEMU

Displays menus for the current mode.

13. TUNE knob

- Radio mode : Changes frequency by turning the knob left/right
- CD, USB, iPod, My Music mode: Searches .songs (files) by turning the knob left/right
- *When the desired song is displayed, press the knob to play the song.
- Moves focus in all selection menus and selects menus



15. FM

- Changes to FM mode.
- Each time the key is pressed, the mode changed in order of FM1 → FM2 → FMA.

16. AM

- Changes to AM mode.
- Each time the key is pressed, the mode changed in order of AM → AMA.

Audio Head Unit



- 1. (EJECT)
- Ejects the disc.

2. RADIO

- Changes to FM/AM mode.
- Each time the key is pressed, the mode is changed in order of FM1 → FM2 → AM.
- * In Setup>Display, the radio pop up screen will be displayed when [Mode Pop up] is turned On.

 When the pop up screen is displayed, use the TUNE knob or keys 1 ~ 6 to select the desired mode.

3. MEDIA

- Changes to CD, USB(iPod), AUX, My Music, BT Audio mode.
- Each time the key is pressed, the mode is changed in order of CD, USB(iPod), AUX, My Music, BT Audio mode.
- ** In Setup>Display, the media pop up screen will be displayed when [Mode Pop up] is turned On .

 When the pop up screen is displayed, use the TUNE knob or keys 1 ~ 6 to select the desired mode.

- 4. PHONE (for *Bluetooth*® Wireless Technology equipped model)
- Operates Phone Screen
- * When a phone is not connected, the connection screen is displayed.

5. PWR/VOL knob

- Power Knob: Turns power On/Off by pressing the knob
- Volume Knob: Sets volume by turning the knob left/right



6. SEEK TRACK

- Radio Mode: Automatically searches for broadcast frequencies.
- CD, USB, iPod, My Music modes
 - Shortly press the key (under 0.8 seconds): Moves to next or previous song (file)
 - Press and hold the key (over 0.8 seconds): Rewinds or fast-forwards the current song.

7. ✓FOLDER ^

 CD MP3, USB mode : Folder Search

8. 1 ~ 6 (Preset)

- Radio Mode: Saves frequencies (channels) or receives saved frequencies (channels)
- CD, USB, iPod, My Music mode
 - 1 RPT : Repeat
 - 2 RDM: Random
- In the Radio, Media, Setup, and Menu pop up screen, the number menu is selected.

9. DISP / (

- Each time the button is shortly pressed (under 0.8 seconds), sets screen Off → Screen On → Screen Off
- * Audio operation is maintained and only the screen will be turned Off. In the screen Off state, press any key to turn the screen On again.

10. SCAN

- Radio Mode
- Press the key (under 0.8 seconds): Previews each broadcast for 5 seconds each
- CD, USB, My Music mode
- Press the key (under 0.8 seconds): Previews each song (file) for 10 seconds each
- * Press the key again to continue listening to the current song (file).

11. SETUP

- Shortly press the key (under 0.8 seconds): Moves to the Display, Sound, Clock, Phone, System setting modes
- Press and hold the key (over 0.8 seconds): Move to the Time setting screen

12. MEMU

Displays menus for the current mode.

13. TUNE knob

- Radio mode : Changes frequency by turning the knob left/right
- CD, USB, iPod, My Music mode: Searches songs (files) by turning the knob left/right
- *When the desired song is displayed, press the knob to play the song.
- Moves focus in all selection menus and selects menus



15. FM

- Changes to FM mode.
- Each time the key is pressed, the mode changed in order of FM1 → FM2.

16. AM

Changes to AM mode.

SETUP (for RDS model)

-

Display Settings

Press the SETUP key Select [Display] through TUNE knob or RET key Select menu through TUNE knob





Mode Pop up

[Mode Pop up] ► Changes On. selection mode

 During On state, press the RADIO or MEDIA key to display the mode change pop up screen.

Scroll text

[Scroll text]▶Set On //Off

- On : Maintains scroll
- Off : Scrolls only one (1) time.

Song Info

When playing an MP3 file, select the desired display info from 'Folder/File' or 'Album/Artist/Song'.



Sound Settings

Press the SETUP key ▶ Select [Sound] through

TUNE knob or

ROM key ▶ Select menu through

TUNE knob



Audio Settings

This menu allows you to set the 'Bass, Middle, Treble' and the Sound Fader and Balance.

Select [Audio Settings]▶ Select menu through TUNE knob▶ Turn TUNE knob left/right to set

- Bass, Middle, Treble: Selects the sound tone.
- Fader, Balance : Moves the sound fader and balance.
- Default : Restores default settings.
- ★ Return: While adjusting values, re-pressing the
 O TUNE knob will restore the parent menu.





Virtual Sound

The PoewrBass, PowerTreble, and Surround can be set.

Select [Virtual Sound] ▶ Set menu through TUNE knob ▶ Set On / Off through TUNE knob

- PowerBass: This is a sound system feature that provides live bass.
- PowerTreble: This is a sound system feature that provides live tremble.
- Surround: This is a sound system feature that provides surround sound.



* May differ depending on the selected audio.

Speed Dependent Volume Control

This feature is used to automatically control the volume level according to the speed of the vehicle.

Select [Speed Dependent Vol.]▶Set in 4 levels [Off/Low/Mid/High] of
TUNE knob



Volume Dialogue

Adjusts voice recognition volume.

Select [Volume Dialogue] Set vol-

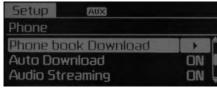
ume of © TUNE knob



Phone Setup (Bluetooth® Wireless Technology equipped model)

Press the SETUP key ▶ Select [Phone] through © TUNE knob or 4 key ▶ Select menu through © TUNE knob







Pair Phone



To pair a Bluetooth® Wireless Technology enabled mobile phone, authentication and connection processes are first required. As a result, you cannot pair your mobile phone while driving the vehicle. First park your vehicle before use.

Select [Pair Phone] ▶ Set through

TUNE knob

- Search for device names as displayed on your mobile phone and connect.
- ② Input the passkey displayed on the screen. (Passkey: 0000)
- * The device name and passkey will be displayed on the screen for up to 3 minutes. If pairing is not completed within the 3 minutes, the mobile phone pairing process will automatically be canceled.

- ③ Pairing completion is displayed.
- In some mobile phones, pairing will automatically be followed by connection.
- * It is possible to pair up to five Bluetooth® Wireless Technology enabled mobile phones.

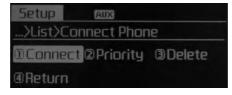
Phone List

The names of up to 5 paired phones will be displayed.



A [▶] is displayed in front of the currently connected phone.

Select the desired name to setup the selected phone.



- Select a mobile phone that is not currently connected.
- ② Connect the selected mobile phone.
- ③ Connection completion is displayed.
- # If a phone is already connected, disconnect the currently connected phone and select a new phone to connect.

Disconnecting a connected phone
 Select [Phone List] ► Select mobile
 phone through TUNE knob ►
 Select [Disconnect Phone]



- ① Select the currently connected mobile phone.
- ② Disconnect the selected mobile phone.
- ③ Disconnection completion is displayed.

 Changing connection sequence (Priority)

This is used to change the order (priority) of automatic connection for the paired mobile phones.

Select [Phone List] ▶ Select [Priority] through
TUNE knob ▶ Select No. 1 Priority mobile phone

- ① Select [Priority].
- ② From the paired phones, select the phone desired for No.1 priority.
- The changed priority sequence is displayed.
- * Once the connection sequence (priority) is changed, the new no. 1 priority mobile phone will be connected.
- when the no. 1 priority cannot be connected: Automatically attempts to connect the most recently connected phone.
- Cases when the most recently connected phone cannot be connected: Attempts to connect in the order in which paired phones are listed.

The connected phone will automatically be changed to No. 1 priority.

Delete

Select [Phone List]▶Select mobile phone through

TUNE knob▶ Select [Delete]

- ① Select the desired mobile phone.
- ② Delete the selected mobile phone.
- 3 Deletion completion is displayed.
- * When attempting to delete a currently connected phone, the phone is first disconnected.

A CAUTION

- When you delete a mobile phone, the mobile phone phone book will also be erased.
- For stable Bluetooth® Wireless Technology communication, delete the mobile phone from the audio and also delete the audio from your mobile phone.

Phone book Download

This feature is used to download phone book and call histories into the audio system.

A CAUTION

- The download feature may not be supported in some mobile phones.
- If a different operation is performed while phone book is being downloaded, downloading will be discontinued. Phone book already downloaded will be saved.
- When downloading new phone book, delete all previously saved phone book before starting download.

Auto Download

When connecting a mobile phone, it is possible to automatically download new phone book and Call Histories.

Select [Auto Download] ► Set On /
Off through © TUNE knob

Audio Streaming

Songs (files) saved in your *Bluetooth®* Wireless Technology enabled mobile phone can be played through the audio system.

Select [Audio Streaming] ▶ Set On /
Off through © TUNE knob

A CAUTION

The Bluetooth® Wireless Technology audio streaming feature may not be supported in some mobile phones.

Outgoing Volume

This is used to set the volume of your voice as heard by the other party while on a *Bluetooth®* Wireless Technology enabled handsfree call.

Select [Outgoing Volume]▶Set volume through

TUNE knob

Bluetooth® Wireless Technology System Off

This feature is used when you do not wish to use the *Bluetooth®* Wireless Technology system.

Select [Bluetooth System Off]▶Set through © TUNE knob

If a phone is already connected, disconnect the currently connected phone and turn the *Bluetooth®* Wireless Technology system off.

Using the *Bluetooth®* Wireless Technology System

To use *Bluetooth®* Wireless Technology when the system is currently off, follow these next steps.

- Turning On *Bluetooth®* Wireless Technology through the **PHONE** Key Press the **PHONE** key ▶ Screen Guidance
- Moves to the screen where Bluetooth® Wireless Technology functions can be used and displays guidance.

- Turning On *Bluetooth*[®] Wireless Technology through the SETUP Key Press the SETUP key ▶ Select [Phone] through © TUNE knob or 3 key
- ① A screen asking whether to turn on Bluetooth[®] Wireless Technology will be displayed.
- ② On the screen, select YES to turn on *Bluetooth*® Wireless Technology and display guidance.
- # If the Bluetooth® Wireless Technology system is turned on, the system will automatically try to connect the most recently connected Bluetooth® Wireless Technology mobile phone.

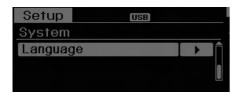
A CAUTION

- Bluetooth® Wireless Technology connection may become intermittently disconnected in some mobile phones. Follow these next steps to try again.
- 1) Turn the Bluetooth® Wireless Technology function within the mobile phone ON/OFF and try to connect again.
- 2) Turn the mobile phone power ON/OFF and try to connect again.
- 3) Completely remove the mobile phone battery, reboot, and then try to connect again.
- 4) Reboot the audio system and try to connect again
- 5) Delete all paired devices in your mobile phone and the audio system and pair again for use.

System Settings

Press the SETUP key ▶ Select [System] through tune knob or 5 key ▶ Select menu through TUNE knob





Memory Information (if equipped)

Displays currently used memory and total system memory.

Select [Memory Information] ► OK

The currently used memory is displayed on the left side while the total system memory is displayed on the right side.



VRS Mode

This feature is used to change voice command feedback between Normal and Expert modes.

Select [VRS Mode]▶Set through

TUNE knob

- Normal: This mode is for beginner users and provides detailed instructions during voice command operation.
- Expert: This mode is for expert users and omits some information during voice command operation. (When using Expert mode, guidance instructions can be heard through the [Help] or [Menu] commands.
- * May differ depending on the selected audio.

Language

This menu is used to set the display and voice recognition language.

Select [Language]▶Set through

TUNE knob



- * The system will reboot after the language is changed.
- * Language support by region
- Deutsch, English(UK), Français, Italiano, Español, Nederlands, Svenska, Dansk, Русский, Polski

SETUP

-

Display Settings

Press the SETUP key ▶ Select [Display] through

TUNE knob or
TUNE knob

TUNE knob





Mode Pop up

[Mode Pop up] ► Changes On. selection mode

 During On state, press the RADIO or MEDIA key to display the mode change pop up screen.

Text Scroll

[Text Scroll]▶Set On // Off

- On : Maintains scroll
- Off : Scrolls only one (1) time.

Media Display

When playing an MP3 file, select the desired display info from 'Folder/File' or 'Album/Artist/Song'.



SOUND SETTINGS

Press the SETUP key ▶ Select [Sound] through

TUNE knob or

TUNE knob

TUNE knob



Sound Settings

This menu allows you to set the 'Bass, Middle, Treble' and the Sound Fader and Balance.

Select [Sound Settings]▶Select menu through © TUNE knob▶Turn © TUNE knob left/right to set

- Bass, Middle, Treble : Selects the sound tone.
- Fader, Balance : Moves the sound fader and balance.
- Default : Restores default settings.
- Return: While adjusting values, re-pressing the
 TUNE knob will restore the parent menu.



Virtual Sound

The PoewrBass, PowerTreble, and Surround can be set.

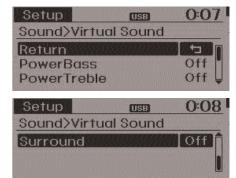
Select [Virtual Sound] ▶ Set menu through

TUNE knob ▶ Set

TUNE knob ▶ Set

TUNE knob

- PowerBass: This is a sound system feature that provides live bass.
- PowerTreble: This is a sound system feature that provides live tremble.
- Surround: This is a sound system feature that provides surround sound.



* May differ depending on the selected audio.

Speed Dependent Volume Control

This feature is used to automatically control the volume level according to the speed of the vehicle.

Select [Speed Dependent Vol.]▶Set in 4 levels [Off/Low/Mid/High] of
TUNE knob



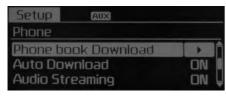
Phone Setup (for *Bluetooth*[®] Wireless Technology equipped model)

Press the SETUP key ▶ Select [Phone] through

TUNE knob or
key ▶ Select menu through

TUNE knob







Pair Phone

⚠ CAUTION

To pair a Bluetooth® Wireless Technology enabled mobile phone, authentication and connection processes are first required. As a result, you cannot pair your mobile phone while driving the vehicle. First park your vehicle before use.

Select [Pair Phone] ▶ Set through

TUNE knob

- Search for device names as displayed on your mobile phone and connect.
- ② Input the passkey displayed on the screen. (Passkey: 0000)
- The device name and passkey will be displayed on the screen for up to 3 minutes. If pairing is not completed within the 3 minutes, the mobile phone pairing process will automatically be canceled.

- ③ Pairing completion is displayed.
- In some mobile phones, pairing will automatically be followed by connection.
- ※ It is possible to pair up to five Bluetooth® Wireless Technology enabled mobile phones.

Phone List

The names of up to 5 paired phones will be displayed.

A $[\mbox{\ensuremath{\triangleright}}]$ is displayed in front of the currently connected phone.



Select the desired name to setup the selected phone.

Connecting a phone

Select [Phone List]▶Select mobile phone through

TUNE knob▶ Select [Connect Phone]



- ① Select a mobile phone that is not currently connected.
- ② Connect the selected mobile phone.
- ③ Connection completion is displayed.
- # If a phone is already connected, disconnect the currently connected phone and select a new phone to connect.

- Disconnecting a connected phone
 Select [Phone List] ► Select mobile
 phone through TUNE knob ►
 Select [Disconnect Phone]
- ① Select the currently connected mobile phone.



- ② Disconnect the selected mobile phone.
- ③ Disconnection completion is displayed.

 Changing connection sequence (Priority)

This is used to change the order (priority) of automatic connection for the paired mobile phones.

Select [Phone List] ▶ Select [Priority] through
TUNE knob ▶ Select No. 1 Priority mobile phone

- ① Select [Priority].
- ② From the paired phones, select the phone desired for No.1 priority.
- The changed priority sequence is displayed.
- Once the connection sequence (priority) is changed, the new no. 1 priority mobile phone will be connected.
- when the no. 1 priority cannot be connected: Automatically attempts to connect the most recently connected phone.
- Cases when the most recently connected phone cannot be connected: Attempts to connect in the order in which paired phones are listed.

- The connected phone will automatically be changed to No. 1 priority.
- Delete

Select [Phone List]▶Select mobile phone through

TUNE knob▶ Select [Delete]

- ① Select the desired mobile phone.
- ② Delete the selected mobile phone.
- 3 Deletion completion is displayed.
- *When attempting to delete a currently connected phone, the phone is first disconnected.

⚠ CAUTION

- When you delete a mobile phone, the mobile phone contacts will also be erased.
- For stable Bluetooth® Wireless Technology communication, delete the mobile phone from the audio and also delete the audio from your mobile phone.

Contacts Download

This feature is used to download contacts and call histories into the audio system.

Select [Contacts Download]▶Select through

TUNE knob

A CAUTION

- The download feature may not be supported in some mobile phones.
- If a different operation is performed while Contacts are being downloaded, downloading will be discontinued. Contacts already downloaded will be saved.
- When downloading new Contacts, delete all previously saved Contacts before starting download.

Auto Download

When connecting a mobile phone, it is possible to automatically download new Contacts and Call Histories.

Select [Auto Download]▶Set On /
Off through © TUNE knob

Audio Streaming

Songs (files) saved in your *Bluetooth®* Wireless Technology enabled mobile phone can be played through the audio system.

Select [Audio Streaming] ▶ Set On /
Off through TUNE knob

A CAUTION

The Bluetooth® Wireless Technology audio streaming feature may not be supported in some mobile phones.

Outgoing Volume

This is used to set the volume of your voice as heard by the other party while on a *Bluetooth®* Wireless Technology enabled handsfree call.

* Even while on a call, the volume can be changed by using the SEEK key.

Bluetooth® Wireless Technology System Off

This feature is used when you do not wish to use the *Bluetooth®* Wireless Technology system.

Select [Bluetooth System Off] Set through TUNE knob

Using the *Bluetooth®* Wireless Technology System

To use *Bluetooth®* Wireless Technology when the system is currently off, follow these next steps.

- Turning On Bluetooth® Wireless Technology through the Key
 Press the key Screen
 Guidance

plays guidance.

- Turning On Bluetooth® Wireless Technology through the Key
 Press the key Select [Phone] through TUNE knob or key
- ① A screen SETUP

@asking whether to turn on *Bluetooth®* Wireless Technology will be displayed.

- ② On the screen, select to turn on Bluetooth® Wireless Technology and display guidance.
- * If the Bluetooth® YES Wireless Technology system is turned on, the system will automatically try to connect the most recently connected Bluetooth® Wireless Technology mobile phone.

A CAUTION

- Bluetooth® Wireless Technology connection may become intermittently disconnected in some mobile phones. Follow these next steps to try again.
- 1) Turn the Bluetooth® Wireless Technology function within the mobile phone ON/OFF and try to connect again.
- 2) Turn the mobile phone power ON/OFF and try to connect again.
- 3) Completely remove the mobile phone battery, reboot, and then try to connect again.
- 4) Reboot the audio system and try to connect again
- 5) Delete all paired devices in your mobile phone and the audio system and pair again for use.

SYSTEM SETTINGS

Press the SETUP key ▶ Select [System] through tune knob or 5 key ▶ Select menu through TUNE knob



Memory Information (if equipped)

Displays currently used memory and total system memory.

Select [Memory Information] ► OK

The currently used memory is displayed on the left side while the total system memory is displayed on the right side.

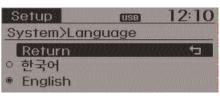


Language

This menu is used to set the display and voice recognition language.

Select [Language]▶Set through

TUNE knob



- *The system will reboot after the language is changed.
- ★ Language support by region
 - 한국어, English

RADIO (for RDS model)

Changing RADIO mode



Press the RADIO key to change the mode in order of FM1 → FM2 → FMA → AM → AMA.

Press the FM or AM key to change the mode in order of FM1 → FM2 and AM.

[Mode Pop up] On state: Displays the change radio mode pop up screen. While the pop up screen is displayed, you can change the radio mode (RADIO: FM1 → FM2 → FMA → AM → AMA / FM : FM1 → FM2 / AM : AM) through the tune knob or 1 ~ 5 keys.

Adjust Volume

Turn the VOL knob left/right to adjust the volume.

SEEK

Press the Y TRACK A key

- Shortly pressing the key (under 0.8 seconds): Changes the frequency.
- Pressing and holding the key (over 0.8 seconds): Automatically searches for the next frequency.

Preset SEEK

Press the 1 ~ 6 key

- Shortly pressing the key (under 0.8 seconds): Plays the frequency saved in the corresponding key.
- Pressing and holding the key (over 0.8 seconds): Pressing and holding the desired key from 1 ~ 6
 will save the currently playing broadcast to the selected key and sound a BEEP.

Press the TA/SCAN key

 Pressing and holding the key (over 0.8 seconds): The broadcast frequency increases and previews each broadcast for 5 seconds each. After scanning all frequencies, returns and plays the current broadcast frequency.

Selecting through manual search

Turn the TUNE knob left/right to adjust the frequency.

- FM : Changes by 50KHz
- AM: Changes by 9khz

Traffic Announcement (TA)

Shortly pressing the TA/SCAN key (under 0.8 seconds): Set On / Off TA Traffic Announcement) mode.

PTY Up/Down

Press the PTY helps
 Prospective PTY in RDS Broadcasting Program Type selection.

MENU

Within MENU key are the A.Store (Auto Store) and Info functions.

AST (Auto Store)

Press the MENU key ▶ Set [①AST] through © TUNE knob or 1 RPT key.



Select AST (Auto Store) to save frequencies with superior reception to presets 1 ~ 6 . If no frequencies are received, then the most recently received frequency will be broadcast.

* Saves only to the Preset memory

1 ~ 6 of FMA or AMA mode.

AF (Alternative Frequency)

Press the MENU key ► Set [②AF] through © TUNE knob or 2 RDM key.

The Alternative Frequency option can be turned On/Off.

Region

Press the MENU key ► Set [③ Region] through ⑥ TUNE knob or 3 key.

The Region option can be turned On/Off.

News

Press the MENU key Set [4] News] through TUNE knob or 4 key.

The News option can be turned On/Off.

Info Volume

Info Volume refers to the sound volume upon receiving News or Traffic information.

The info volume can be controlled by turning the VOL knob left/right while a news or traffic broadcast is playing.

* AF, Region, and News are RDS Radio menus.

RADIO Changing RADIO mode



Press the RADIO key to change the mode in order of FM1 \rightarrow FM2 \rightarrow AM.

Press the FM or AM key to change the mode in order of FM1 → FM2 and AM

 When the power is off, press the RADIO or FM AM key to turn on the audio system and receive radio broadcasts.

[Mode Pop up] On state: Displays the change radio mode pop up screen. While the pop up screen is displayed, you can change the radio mode (RADIO: FM1 => FM2 => AM / FM : FM1 => FM2 / AM : AM) through the tune knob or 1 => keys.

Adjust Volume

Turn the VOL knob left/right to adjust the volume.

SEEK

Press the Y TRACK A key

- Shortly pressing the key (under 0.8 seconds): Changes the frequency.
- Pressing and holding the key (over 0.8 seconds): Automatically searches for the next frequency.

Preset SEEK

Press the 1 ~ 6 key

- Shortly pressing the key (under 0.8 seconds): Plays the frequency saved in the corresponding key.
- Pressing and holding the key (over 0.8 seconds): Pressing and holding the desired key from 1 ~ 6 will save the currently playing broadcast to the selected key and sound a BEEP.

SCAN

Press the SCAN key

- Shortly pressing the key (under 0.8 seconds): The broadcast frequency increases and previews each broadcast for 5 seconds each. After scanning all frequencies, returns and plays the current broadcast frequency.
- Pressing and holding the key (over 0.8 seconds): Previews the broadcasts saved in Preset ~ 6
 for 5 seconds each.

Selecting through manual search

Turn the TUNE knob left/right to adjust the frequency.

AM100GMGE / AM110GMGE

- FM : Changes by 50KHz- AM : Changes by 9khz

AM100GMGG / AM110GMGG

- FM : Changes by 100KHz- AM : Changes by 9khz

AM100GMGN / AM110GMGN

- FM : Changes by 200KHz

- AM : Changes by 10khz

MENU

Within MENU key are the A.Store (Auto Store) and Info functions.



A.Store (Auto Store)

Press the MENU key ▶ Set [①]
A.Store] through ◎ TUNE knob or

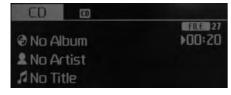
1 RPT key.

Select A.Store(Auto Store) to save frequencies with superior reception to presets — 6 —. If no frequencies are received, then the most recently received frequency will be broadcast.

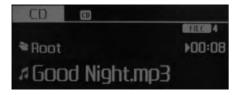
BASIC METHOD OF USE: Audio CD / MP3 CD / USB / iPod / My Music

Press the MEDIA key to change the mod mode in order of CD → USB(iPod) → AUX → My Music → BT Audio.

The folder/file name is displayed on the screen.



<Audio CD>



<CD MP3>



<My Music>

- *The CD is automatically played when a CD is inserted.
- * The USB music is automatically played when a USB is connected.

Repeat

While song (file) is playing ► 1 RPT (RPT) key

Audio CD, MP3 CD, USB, iPod, My Music mode: RPT on screen

To repeat one song (Shortly pressing the key (under 0.8 seconds)):
 Repeats the current song.

MP3 CD, USB mode: FLD.RPT on screen

- To repeat folder (pressing twice): repeats all files within the current folder.
- * Press the 1 RPT key again to turn off repeat.

Random

While song (file) is playing ▶ 2 RDM (RDM) key

Audio CD, My Music mode: RDM on screen

 Random (Shortly pressing the key (under 0.8 seconds)): Plays all songs in random order.

MP3 CD, USB mode: FLD.RDM on screen

 Folder Random (Shortly pressing the key (under 0.8 seconds)): Plays all files within the current folder in random order.

iPod mode: ALB RDM on screen

 Album Random (Shortly pressing the key (under 0.8 seconds)): Plays all files within albums of the current category in random order.

MP3 CD, USB, iPod mode: ALL RDM on screen

- All Random (pressing twice): Plays all files in random order.
- ★ Press the ②RDM key again to turn off repeat.

Changing Song/File

While song (file) is playing ►

SEEK key

- Shortly pressing the key (under 0.8 seconds): Plays the current song from the beginning.
- Pressing and holding the key (over 0.8 seconds): Rewinds the song.

While song (file) is playing▶

SEEK
TRACK key

- Shortly pressing the key (under 0.8 seconds): Plays the next song.
- Pressing and holding the key (over 0.8 seconds): Fast forwards the song.

Scan (for RDS model)

While song (file) is playing ► TA/SCAN key

- Pressing and holding the key (over 0.8 seconds): Scans all songs for 10 seconds starting from the next song.
- * Pressing and holding the TA/SCAN key again to turn off.

Scan

While song (file) is playing ► SCAN key

- Shortly pressing the key (under 0.8 seconds): Scans all songs from the next song for 10 seconds each.
- * Press the SCAN key again to turn off.
- * The SCAN function is not supported in iPod mode

Folder Search : MP3 CD, USB Mode

While file is playing ► FOLDER ^/
FOLDER ^ (Folder Up)
key

Searches the next folder.

While file is playing ► ✓ FOLDER (Folder Down) key

- Searches the parent folder.
- * In iPod mode, moves to the Parent Folder.

Searching Songs (File)

- Turning TUNE knob : Searches for songs (files)

MENU: Audio CD

Press the CD MP3 mode MENU key to set the Repeat, Random, Information features.



Repeat

Press the MENU key Set [TRPT] through the TUNE knob or Tune key to repeat the current song.

* Press RPT again to turn off.

Random

Press the MENU key > Set [2] RDM] through the TUNE knob or RDM key to randomly play songs within the current folder.

★ Press RDM again to turn off.

Information

Press the MENU key Set [3]Info] through the TUNE knob or key to display information of the current song.

★ Press the MENU key to turn off info display.

MENU: MP3 CD/USB

Press the CD MP3 mode MENU key to set the Repeat, Folder Random, Folder Repeat, All Random, Information, and Copy features.



Repeat

Press the MENU key Set [1]RPT] through the TUNE knob or 1 RPT key to repeat the current song.

* Press RPT again to turn off.

Folder Random

Press the MENU key Set [2] F.RDM] through the TUNE knob or Rev key to randomly play songs within the current folder.

h Press F.RDM again to turn off.

Folder Repeat

Press the MENU key Set [③F.RPT] through the ⑥ TUNE knob or 3 key to repeat songs within the current folder.

* Press F.RPT again to turn off.

All Random

Press the MENU key Set [4] A.RDM] through the TUNE knob or 4 key to randomly play all songs within the CD.

Information

Press the MENU key Set [SInfo] through the TUNE knob or key to display information of the current song.

* Press the MENU key to turn off info display.

Copy (if equipped)

Press the MENU key ► Set [⑥Copy] through the ⑥ TUNE knob or ⑥ key.

This is used to copy the current song into My Music. You can play the copied Music in My Music mode.

- If another key is pressed while copying is in progress, a pop up asking you whether to cancel copying is displayed.
- * Music will not be played while copying is in progress.

MENU: iPod

In iPod mode, press the MENU key to set the Repeat, Album Random, All Random, Information and Search features.



Repeat

Press the MENU key Set [TRPT] through the TUNE knob or Tune key to repeat the current song.

* Press RPT again to turn repeat off.

Album Random

Press the MENU key ▶ Set [② Alb.RDM] through the ◎ TUNE knob or 2 RDM key.

Plays albums within the currently playing category in random order.

 $\ensuremath{\mbox{\#}}$ Press Alb.RDM again to turn off.

All Random

Press the MENU key ► Set [③ A.RDM] through the ⑥ TUNE knob or ③ key.

Plays all songs within the currently playing category in random order.

* Press A.RDM again to turn off.

Information

Press the MENU key ► Set [4]Info] through the
TUNE knob or 4 key.

Displays information of the current song.

* Press the MENU key to turn off info display.

Search

Press the MENU key ▶ Set [⑤] Search] through the ⑥ TUNE knob or ⑤ key.

Displays iPod category list.

Searching iPod category is MENU key pressed, move to parent category.

MENU: My Music Mode (if equipped)

In My Music mode, press the MENU key to set the Repeat, Random, Information, Delete, Delete All, and Delete Selection features.



Repeat

Press the MENU key ► Set [①RPT] through the © TUNE knob or 1 RPT key.

Repeats the currently playing song.

* Press RPT again to turn repeat off.

Random

Press the MENU key ► Set [②RDM] through the ◎ TUNE knob or 2 RDM key.

Plays all songs in random order.

* Press RDM again to turn random off.

Information

Press the MENU key ► Set [③Info] through the ⑥ TUNE knob or 3 key.

Displays information of the current song.

* Press the MENU key to turn off info display.

Delete

Press the MENU key ► Set [4] Delete] through the
TUNE knob or 4 key.

Deletes currently playing file

In the play screen, pressing delete will delete the currently playing song.

Deletes file from list



- ① Select the file you wish to delete by using the © TUNE knob.
- ② Press the MENU key and select the delete menu to delete the selected file.

Delete All

Press the MENU key ► Set [⑤Del.All] through the ⑥ TUNE knob or 5 key.

Deletes all songs of My Music.

Delete Selection

Press the MENU key ► Set [6] Del.Sel] through the © TUNE knob or 6 key.

Songs within My Music are selected and deleted.

① Select the songs you wish to delete from the list.



② After selecting, press the MENU key and select the delete menu.



* NOTICE - USING THE My Music

- Even if memory is available, a maximum of 6,000 songs can be stored.
- The same song can be copied up to 1,000 times.
- Memory info can be checked in the System menu of Setup.

AUX

AUX is used to play external MEDIA currently connected with the AUX terminal.

AUX mode will automatically start when an external device is connected with the AUX terminal.

If an external device is connected, you can also press the MEDIA key to change to AUX mode.



* AUX mode cannot be started unless there is an external device connected to the AUX terminal.

* NOTICE - USING THE AUX

• Fully insert the AUX cable into the AUX terminal for use.

Bluetooth® Wireless Technology AUDIO (if equipped)

What is *Bluetooth®* Wireless Technology?

Bluetooth® Wireless Technology is a wireless technology that allows multiple devices to be connected in a short range, low-powered devices like hands-free, stereo headset, wireless remote controller, etc. For more information, visit the Bluetooth® Wireless Technology website at www.Bluetooth.com

Before using *Bluetooth®* Wireless Technology audio features

- Bluetooth® Wireless Technology audio may not be supported depending on the compatibility of your Bluetooth® Wireless Technology mobile phone.
- In order to use Bluetooth® Wireless Technology audio, you must first pair and connect the Bluetooth® Wireless Technology mobile phone.
- Bluetooth® Wireless Technology audio can be used only when the [Audio Streaming] of Phone is turned On.
- ** Setting **Bluetooth®** Wireless Technology Audio Streaming: Press the SETUP key ▶ Select [Phone] through the tune knob ▶ Select [Audio Streaming] through the TUNE knob ▶ Set On / Off

Starting *Bluetooth*® Wireless Technology Audio

- Press the MEDIA key to change the mode in order of CD → USB → AUX
 → My Music → BT Audio.
- If BT Audio is selected, *Bluetooth®* Wireless Technology audio will start playing.
- * Audio may not automatically start playing in some mobile phones.

Using the *Bluetooth*® Wireless Technology audio features

• Play / Pause

Press the TUNE knob to play and pause the current song.



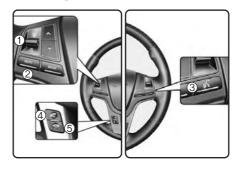
* The previous song / next song / play / pause functions may not be supported in some mobile phones.

PHONE (if equipped)

Before using the *Bluetooth®* Wireless Technology phone features

- In order to use Bluetooth[®] Wireless Technology phone, you must first pair and connect the Bluetooth[®] Wireless Technology mobile phone.
- If the mobile phone is not paired or connected, it is not possible to enter Phone mode. Once a phone is paired or connected, the guidance screen will be displayed.
- If Priority is set upon vehicle ignition (IGN/ACC ON), the Bluetooth® Wireless Technology phone will be automatically connected. Even if you are outside, the Bluetooth® Wireless Technology phone will be automatically connected once you are in the vicinity of the vehicle. If you do not want automatic Bluetooth® Wireless Technology phone connection, set the Bluetooth® Wireless Technology power to OFF.

Making a call using the Steering remote controller



- 1. VOLUME button : Raises or lowers speaker volume.
- 2.MUTE button : Mute the microphone during a call.
- 3. button : Activates voice recognition.
- 4. button : Places and transfers calls.
- 5. button: Ends calls or cancels functions.

- Check call history and making call
- Shortly press (under 0.8 seconds) the key on the steering remote controller.
- ② The call history list will be displayed on the screen.
- ③ Press the key again to connect a call to the selected number.
- Redialing the most recently called number
- ① Press and hold (over 0.8 seconds) the key on the steering remote controller.
- ② The most recently called number is redialed.

Phone MENU (for RDS model)

Press the **PHONE** key to display three menus (Call History, Phone Book, Phone Setup).



Call history

Press the PHONE key ► Set [1] History] through the
TUNE knob or
Press the PHONE key ► Set [1]

The call history is displayed and can be used to select a number and make a call.

If call history does not exist, a screen asking whether to download call history is displayed. (The download feature may not be supported in some mobile phones)

Phone Book

Press the PHONE key ► Set [②P. Book] through the ◎ TUNE knob or 2 RDM key.

The phone book is displayed and can be used to select a number and make a call.

- If more than one number is saved to one contact, then a screen showing the mobile phone number, Home and office number is displayed. Select the desired number to make the call.
- If phone book do not exist, a screen asking whether to download phone book is displayed. (The download feature may not be supported in some mobile phones)

Phone Setup

Press the PHONE key ► Set [③ Setup] through the ⑥ TUNE knob or Ⅰ3 key.

The *Bluetooth®* Wireless Technology mobile phone setup screen is displayed. For more information, refer to "Phone Setup".

Phone MENU

Press the **PHONE** key to display three menus (Call History, Contacts, Phone Setup).



Call history

Press the PHONE key ► Set [1] History] through the

TUNE knob or

PHONE key ► Set [1]

The call history is displayed and can be used to select a number and make a call.

If call history does not exist, a screen asking whether to download call history is displayed. (The download feature may not be supported in some mobile phones)

Contacts

Press the PHONE key ► Set [2] Contacts] through the
TUNE knob or 2 RDM key.

The Contacts are displayed and can be used to select a number and make a call.

- # If more than one number is saved to one contact, then a screen showing the mobile phone number, Home and office number is displayed. Select the desired number to make the call.
- # If Contacts do not exist, a screen asking whether to download Contacts is displayed. (The download feature may not be supported in some mobile phones)

Phone Setup

Press the PHONE key ► Set [③ Setup] through the ⑥ TUNE knob or 3 key.

The *Bluetooth®* Wireless Technology mobile phone setup screen is displayed. For more information, refer to "Phone Setup".

* NOTICE - USING THE Bluetooth® Wireless Technology CELLULAR PHONE

- Do not use a cellular phone or perform *Bluetooth*® Wireless Technology settings (e.g. pairing a phone) while driving.
- Some Bluetooth® Wireless
 Technology -enabled phones may
 not be recognized by the system or
 fully compatible with the system.
- Before using Bluetooth® Wireless Technology related features of the audio system, refer your phone's User's Manual for phone-side Bluetooth® Wireless Technology operations.
- The phone must be paired to the audio system to use Bluetooth® Wireless Technology related features.
- You will not be able to use the hands-free feature when your phone (in the car) is outside of the cellular service area (e.g. in a tunnel, in a underground, in a mountainous area, etc.).

(Continued)

(Continued)

- If the cellular phone signal is poor or the vehicles interior noise is too loud, it may be difficult to hear the other person's voice during a call.
- Do not place the phone near or inside metallic objects, otherwise communications with *Bluetooth®* Wireless Technology system or cellular service stations can be disturbed.
- While a phone is connected through Bluetooth® Wireless Technology your phone may discharge quicker than usual for additional Bluetooth® Wireless Technology-related operations.
- Some cellular phones or other devices may cause interference noise or malfunction to audio system. In this case, store the device in a different location may resolve the condition.
- Phone contact names should be saved in English or they may not be displayed correctly.

(Continued)

(Continued)

- If Priority is set upon vehicle ignition(IGN/ACC ON), the
 Bluetooth® Wireless Technology
 phone will be automatically connected.
 - Even if you are outside, the *Bluetooth*® Wireless Technology phone will be automatically connected once you are in the vicinity of the vehicle.
- If you do not want automatic Bluetooth® Wireless Technology connection, turn the Bluetooth® Wireless Technology feature off.
- The hands-free call volume and quality may differ depending on the mobile phone type.
- Bluetooth® Wireless Technology features can be used only when the mobile phone has been paired and connected with the device. For more information on pairing and connecting Bluetooth® Wireless Technology enabled mobile phones, refer to the "Phone Setup" section.

(Continued)

(Continued)

- When a Bluetooth® Wireless Technology mobile phone is connected, a (≥) icon will appear at the top of the screen. If a (≥) icon is not displayed, this indicates that a Bluetooth® Wireless Technology enabled device has not been connected. You must connect the device before use. For more information on Bluetooth® Wireless Technology mobile phones, refer to the "Phone Setup" section.
- Pairing and connecting a Bluetooth® Wireless Technology enabled mobile phone will work only when the Bluetooth® Wireless Technology option within your mobile phone has been turned on. (Methods of turning on the Bluetooth® Wireless Technology enabled feature may differ depending on the mobile phone.)

(Continued)

(Continued)

- In some mobile phones, starting the ignition while talking through Bluetooth® Wireless Technology enabled handsfree call will result in the call becoming disconnected. (Switch the call back to your mobile phone when starting the ignition.)
- Some features may not be supported in some *Bluetooth*® Wireless Technology mobile phone and devices.
- Bluetooth® Wireless Technology enabled operation may be unstable depending on the communication state.
- Placing the audio system within an electromagnetic environment may result in noise interference.

* NOTICE - USING VOICE COM-MAND

- The voice recognition feature of this product supports recognition of the commands listed within this user's manual.
- While using voice recognition, operating the steering remote control or the device will terminate voice recognition and allow you to manually operate desired functions.
- Position the microphone above the head of the driver's seat. For superior performance, maintain good posture when saying voice commands.

(Continued)

(Continued)

- Voice recognition may not function properly due to outside noise.
 The following conditions can affect the performance of Voice Recognition:
 - When the windows and sunroof are open
 - When the heating/cooling system is on
 - When passing a tunnel
 - When driving on rugged and uneven roads
- After downloading Bluetooth® Wireless Technology phone book, the system requires some times to convert the phone book into voice information. During this time, voice recognition may not operate properly.
- Upon inputting your phone book, special symbols and numbers cannot be recognized by voice. For example, "# John Doe%&" will be recognized as "John Doe".

VOICE COMMAND (if equipped)

Starting Voice Command

- To start voice command, shortly press the key on the steering wheel remote controller.
- If voice command is in [Normal Mode], then the system will say "Please say a command. Beep"
- If voice command is in [Expert Mode], then the system will only say a "Beep-"
- Say the voice command.

* NOTICE

For proper voice recognition, say the voice command after the guidance message and the "Beep" sound.

Skipping the Guidance Message

While the guidance message is being stated, shortly press the key (under 0.8 seconds) to discontinue the guidance message and sound the "beep".

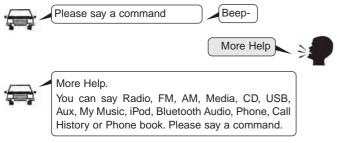
After the "beep", say the voice command.



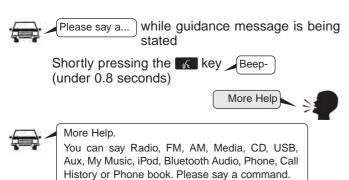
Ending Voice Command

- While using voice command, press and hold the key (over 0.8 seconds) to end voice command.
- While using voice command, pressing the steering wheel remote controller or a different key will end voice command.
- In a state where the system is waiting for your voice command, say "cancel" or "end" to end voice command.
- In a state where the system is waiting for your voice command, shortly press the key (under 0.8 seconds) to end voice command.

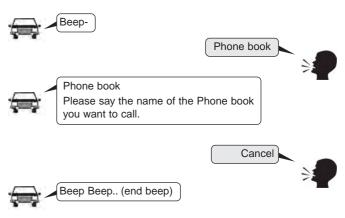
- # Illustration on using voice commands
- Starting voice command.
 Shortly pressing the key (under 0.8 seconds):



Skipping Voice Recognition
 Shortly pressing the key (under 0.8 seconds):



End voice command.
 Shortly pressing the key (under 0.8 seconds):



Voice Command List

• Common Commands: These are commands that can be used in all situations. (However, some commands may not be supported in special circumstances.)

Command	Function
More Help	Provides guidance on commands that can be used anywhere in the system.
Help	Provides guidance on commands that can be used within the current mode.
Call <name></name>	Calls <name> saved in phone book Ex) Call "John"</name>
Phone	Provides guidance on Phone related commands. After saying this command, say "Call History", "Phone book", "Dial Number" to execute corresponding functions.
Call History	Displays the Call History screen.
Phone book	Displays the phone book screen. After saying this command, say the name of a phone book saved in the phone book to automatically connect the call.
Dial Number	Display the Dial number screen. After saying this command, you can say the number what you want to call.
Redial	Connects the most recently called number.
Radio	 When listening to the radio, displays the next radio screen. (FM1→FM2→FMA→AM→AMA) When listening to a different mode, displays the most recently played radio screen.

Command	Function
FM	When currently listening to the FM radio, maintains the current state.
	When listening to a different mode, displays the most recently played FM screen.
FM1(FM One)	Displays the FM1 screen.
FM2(FM Two)	Displays the FM2 screen.
FMA	Displays the FMA screen.
AM	Displays the AM screen.
AMA	Displays the AMA screen.
FM Preset 1~6	Plays the most recently played broadcast saved in FM Preset 1~6.
AM Preset 1~6	Plays the broadcast saved in AM Preset 1~6.
FM 87.5~107.9	Plays the FM broadcast of the corresponding frequency.
AM 530~1710	Plays the AM broadcast of the corresponding frequency.
TA on	Enable Traffic Announcement
TA off	Disable Traffic Announcement
News on	Enable RDS News feature
News off	Disable RDS News feature

Command	Function
Media	Moves to the most recently played media screen.
Play Track 1~30	If a music CD has been inserted, plays the corresponding track.
CD	Plays the music saved in the CD.
Search CD	Moves to the CD track or file selection screen. • For audio CDs, move to the screen and say the track number to play the corresponding track.
	 Moves to MP3 CD file selection screen. After manually operate the device to select and play music.
USB	Plays USB music.
Search USB	Moves to USB file selection screen. After manually operate the device to select and play music.
iPod	Plays iPod music.
Search iPod	Moves to the iPod file selection screen. After, manually operate the device to select and play music.
My Music	Plays the music saved in My Music.
Search My Music	Moves to My Music file selection screen. After manually operate the device to select and play music.

Command	Function
AUX (Auxiliary)	Plays the connected external device.
Bluetooth Audio	Plays the music saved in connected Bluetooth® Wireless Technology device.
Mute	Mutes the radio or music volume.
Pardon?	Repeats the most recent comment.
Cancel (Exit)	Ends voice command.

• FM/AM radio commands: Commands that can be used while listening to FM, AM radio.

Command	Function
Preset 1~6	Plays the broadcast saved in Preset 1~6.
Auto Store	Automatically selects radio broadcast frequencies with superior reception and saves in Presets 1~6.
Preset Save 1~6	Saves the current broadcast frequency to Preset 1~6.
Seek up	Plays the next receivable broadcast.
Seek down	Plays the previous receivable broadcast.
Next Preset	Selects the preset number next to the most recently selected preset. (Example: When currently listening to preset no. 3, then preset no. 4 will be selected.)
Previous Preset	Selects the preset number previous to the most recently selected preset. (Example: When currently listening to preset no. 3, then preset no. 2 will be selected.)
Scan	Scans receivable frequencies from the current broadcast and plays for 10 seconds each.
Preset Scan	Moves to the next preset from the current present and plays for 10 seconds each.
AF on	Enable Alternative Frequency feature
AF off	Disable Alternative Frequency feature
Region	Enable Region feature

• Audio CD commands: Commands that can be used while listening to Audio CD.

Command	Function
Region off	Disable Region feature
Program Type	Moves to the RDS Program type selection screen. After, manually operate the device to select a desired program type.
Random	Randomly plays the tracks within the CD.
Random Off	Cancels random play to play tracks in sequential order.
Repeat	Repeats the current track.
Repeat Off	Cancels repeat play to play tracks in sequential order.
Next Track	Plays the next track.
Previous Track	Plays the previous track.
Scan	Scans the tracks from the next track for 10 seconds each.
Track 1~30	Plays the desired track number.
Search Track	Moves to the track selection screen. After, say the track name to play the corresponding track.
Information	Displays the information screen of the current track.

 MP3 CD / USB commands: Commands that can be used while listening to music files saved in CD and USB.

Command	Function
Random	Randomly plays the files within the current folder.
All Random	Randomly plays all saved files.
Random Off	Cancels random play to play files in sequential order.
Repeat	Repeats the current file.
Folder Repeat	Repeats all files in the current folder.
Repeat Off	Cancels repeat play to play files in sequential order.
Next File	Plays the next file.
Previous File	Plays the previous file.
Scan	Scans the files from the next files for 10 seconds each.
Search File	Moves to the file selection screen.
Search Folder	Moves to the folder selection screen.
Information	Displays the information screen of the current file.
Сору	Copies the current file into My Music.

• iPod Commands: Commands that can be used while playing iPod.

Command	Function
All Random	Randomly plays all saved songs.
Random	Randomly plays the songs within the current category.
Random Off	Cancels random play to play songs in sequential order.
Repeat	Repeats the current song.
Repeat Off	Cancels repeat play to play songs in sequential order.
Next Song	Plays the next song.
Previous Song	Plays the previous song.
Search Song	Moves to the song selection screen.
Information	Displays the information screen of the current song.

• My Music Commands: Commands that can be used while playing My Music.

Command	Function
Random	Randomly plays all saved files.
Random Off	Cancels random play to play files in sequential order.
Repeat	Repeats the current file.
Repeat Off	Cancels repeat play to play files in sequential order.
Next File	Plays the next file.
Previous File	Plays the previous file.
Scan	Scans the files from the next files for 10 seconds each.
Search File	Moves to the file selection screen.
Information	Displays the information screen of the current file.
Delete	Deletes the current file. You will bypass an additional confirmation process.
Delete All	Deletes all files saved in My Music. You will bypass an additional confirmation process.

• Bluetooth® Wireless Technology Audio Commands: Commands that can be used while playing Phone Music.

Command	Function
Play	Plays the currently paused song.
Pause	Pauses the current song.

APPENDIX

Name	Description
AST (A.store)	Automatically selects and saves
	channels
SDVC	Speed Dependent Volume
	Control

■ CD Player (for RDS model) :





*No Bluetooth logo will be shown if the Bluetooth® Wireless Technology feature is not supported.

SYSTEM CONTROLLERS AND FUNCTIONS

Display and settings may differ depending on the selected audio.

Audio Head Unit (for RDS, *Bluetooth®* Wireless Technology equipped model)



1. **▲** (EJECT)

Ejects the disc.

2. RADIO

- Converts to Radio(FM/AM) mode.
- Each time the key is pressed, the mode is changed in order of FM1 → FM2 → FMA → AM → AMA.

3. MEDIA

- Start Media mode
- Each time the key is pressed, the mode is changed in order of CD, USB(iPod) AUX, My Music, BT Audio.
- 4. PHONE (for *Bluetooth*® Wireless Technology equipped model)
- Converts to Phone mode
- h When a phone is not connected, the connection screen is displayed.

5. PWR/VOL knob

- Power : Press to turn power on/off.
- Volume : Turn left/right to control volume.

6. SEEK ^

- When pressed shortly(under 0.8 seconds)
- Radio mode : plays previous/next frequency.
- Media (CD/USB/iPod/My Music) modes : changes the track, Song(file)
- When pressed and held (0.8 seconds)
- Radio mode: continuously changes the frequency. Upon release, plays the current frequency.
- Media(CD/USB/iPod/My Music) modes: rewinds or fast forwards the track or file
- During a Handsfree call, controls the call volume.

7. \vee PTY \wedge

- RDS Radio mode : searches RDS program types.
- CD/USB/MP3 modes : searches folders.



8.

• Turns the monitor display on/off.

9. TA

 Set TA(Traffic Announcement) feature On/Off.

10. SCAN

- Radio Mode : previews all receivable broadcasts for 5 seconds each
- Media (CD/USB/iPod/My Music) modes: previews each song (file) for 10 seconds each.

11. SETUP

Converts to Setup mode.

12. TUNE knob

- Radio mode : turn to change broadcast frequencies.
- Media (CD/USB/iPod/My Music) modes: turn to search tracks/channels/files.

14. RESET

 Forced system termination and system restart.

Audio Head Unit



15. FM

- Changes to FM mode.
- Each time the key is pressed, the mode changed in order of FM1 → FM2 → FMA.

16. AM

- Changes to AM mode.
- Each time the key is pressed, the mode changed in order of AM → AMA.

17. MEDIA

- Start Media mode
- Each time the key is pressed, the mode is changed in order of CD, USB(iPod), AUX, My Music.



Mutes audio volume.

SYSTEM CONTROLLERS AND FUNCTIONS

* Display and settings may differ depending on the selected audio.

Audio Head Unit (for Bluetooth® Wireless Technology equipped model)



1. **△** (EJECT)

• Ejects the disc.

2. RADIO

- Converts to Radio(FM/AM) mode.
- Each time the key is pressed, the mode is changed in order of FM1→FM2→AM.

3. MEDIA

- Start Media mode
- Each time the key is pressed, the mode is changed in order of CD, USB(iPod) AUX, My Music, BT Audio.
- 4. PHONE (for *Bluetooth*[®] Wireless Technology equipped model)
- Converts to Phone mode
- * When a phone is not connected, the connection screen is displayed.
- 5. PWR/VOL knob
- Power : Press to turn power on/off.
- Volume : Turn left/right to control volume.

6. SEEK ^

- When pressed shortly(under 0.8 seconds)
- Radio mode : plays previous/next frequency.
- Media (CD/USB/iPod/My Music) modes : changes the track, Song(file)
- When pressed and held (0.8 seconds)
 - Radio mode : continuously changes the frequency. Upon release, plays the current frequency.
 - Media(CD/USB/iPod/My Music) modes: rewinds or fast forwards the track or file
 - During a Handsfree call, controls the call volume.

7. ∨FOLDER ^

CD/USB/MP3 modes : searches folders.



8. DISP

• Turns the monitor display on/off.

9. MUTE Mutes audio volume.

10. SCAN

- Radio Mode : previews all receivable broadcasts for 5 seconds each
- Media (CD/USB/iPod/My Music) modes: previews each song (file) for 10 seconds each.

11. SETUP

Converts to Setup mode.

12. TUNE knob

- Radio mode: turn to change broadcast frequencies.
- Media (CD/USB/iPod/My Music) modes: turn to search tracks/channels/files.

14. RESET

 Forced system termination and system restart.

Audio Head Unit



15. FM

- Converts to FM mode.
- Each time the key is pressed, the mode changed in order of FM1 → FM2.

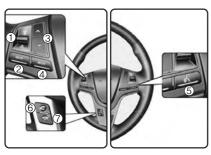
16. AM

• Converts to AM mode.

17. MEDIA

- Start Media mode
- Each time the key is pressed, the mode is changed in order of CD, USB(iPod), AUX, My Music.

Steering remote controller



- 1. VOLUME
- Used to control volume.
- 2. MUTE
- Mutes audio volume.

3. SEEK

- When pressed shortly (under 0.8 seconds)
- Radio mode : searches broadcast frequencies saved to presets.
- Media(CD/USB/iPod/My Music/BT Audio) modes: changes the track, file or chapter.
- When pressed and held (over 0.8 seconds)
- Radio mode, automatically searches broadcast frequencies and channels
- Media(CD/USB/iPod/My Music) modes, rewinds or fast forwards the track or song(file)

4. MODE

- Each time this key is pressed, the mode is changed in order of FM1→ FM2→FMA→AM→AMA→USB or iPod→AUX→My Music→BT Audio
- If the media is not connected or a disc is not inserted, corresponding modes will be disabled.

5. (if equipped)

- When pressed shortly (under 0.8 seconds)
- Starts voice recognition
- When selecting during a voice prompt, stops the prompt and converts to voice command waiting state
- When pressed and held (over 0.8 seconds)
 - Ends voice recognition

.

6. C

- When pressed shortly (under 0.8 Ends phone call seconds)
- -When pressed in the phone screen, displays call history screen
- When pressed in the dial screen, makes a call
- When pressed in the incoming call screen, answers the call
- When pressed during call waiting, switches to waiting call (Call Waiting)
- When pressed and held (over 0.8 seconds)
 - When pressed in the Bluetooth® Wireless Technology Handsfree wait mode, redials the last call
 - When pressed during a Bluetooth® Wireless Technology Handsfree call, switches call back to mobile phone (Private)
 - When pressed while calling on the mobile phone, switches call back to Bluetooth® Wireless Technology Handsfree (Operates only when Bluetooth® Wireless Technology Handsfree is connected)

7.

Radio Mode (for RDS model)

1

Basic Mode Screen





- Mode Display
 Displays currently operating mode
- 2. Frequency
 Displays the current frequency
- 3. PresetDisplays current preset number [1] ~[6]
- Preset Display
 Displays saved presets
- Autostore
 Automatically saves frequencies with superior reception to Preset buttons
- 6. RDS Menu Displays the RDS Menu
- 7. RDS Info
 Displays RDS broadcast information

Switching to Radio Mode

Pressing the RADIO key will change the operating mode in order of FM1 →FM2→FMA→AM→AMA.

Pressing the FM or AM key to change the operating mode in order of FM1→FM2→FMA and AM→ AMA.



If [Pop-up Mode] is turned on within SETUP ▶ [Display], then pressing the RADIO key will display the Radio Pop-up Mode screen.

Turn the ©TUNE knob to move the focus. Press the knob to select.

Searching Radio Frequencies

Using Seek

Press the TRACK key to play the previous/next frequency.

Using TUNE

Turn the **TUNE** knob to select the desired frequency.

- FM: Increases/decreased by 50kHz
- AM: Increases/decreased by 9kHz

Using Radio Mode

Selecting/Saving Presets

Press the 1 ~ 6 buttons to play the desired preset.



Press the button to display the broadcast information for the frequency saved to each button.



* NOTICE

While listening to a frequency you want to save as a preset, press and hold one of the [1] ~ [6] preset buttons (over 0.8 seconds) to save the current frequency to the selected preset.

Auto Store

Press the button to automatically save receivable frequencies to Preset buttons.

* NOTICE

While Auto Store is operating, pressing the [Cancel] button again will cancel Auto Store and restore the previous frequency.

RDS Menu

Press the button to set the AF (Alternative Frequency), Region and News features.



* NOTICE

The RDS Menu is not supported within AM or AMA mode.

Scan

- Radio Mode
- Press the key (under 0.8 seconds): Previews each broadcast for 5 seconds each
- CD, USB, My Music mode
 - Press the key (under 0.8 seconds): Previews each song (file) for 10 seconds each
- * Press the key again to continue listening to the current song (file).

* NOTICE

Once scan is complete, the previous frequency will be restored.

While Scan is operating, pressing the SCAN key will cancel the scan operation.

Program Type

Press the Folder key to search for the desired Program type.



Turn the ©TUNE knob left/right to search for the desired program type. Once you find the desired program type, press the ©TUNE knob.

After selecting the desired Program Type and while the Program Type is blinking (approximately 5 seconds), pressing the SEEK key will allow you to select a different Program Type broadcast.

TA (Traffic Announcement)

Press the TA key to turn the TA (Traffic Announcement) feature On/Off.



RADIO MODE

Basic Mode Screen





- 1. Mode Display Displays currently operating mode
- 2. Frequency Displays the current frequency
- 3. Preset Displays current preset number [1] ~ [6]
- 4. Preset Display Displays preset buttons
- 5. Autostore Automatically saves frequencies with superior reception to Preset buttons

Switching to Radio Mode

Pressing the RADIO key will change the operating mode in order of FM1 →FM2→AM

Press the FM or AM key to change the mode in order of FM1→ FM2 and AM.

If [Mode Pop-up] is turned on within SETUP > [Display], then pressing the RADIO key will display the Radio Pop-up Mode screen.



Turn the OTUNE knob to move the focus. Press the knob to select.

Searching Radio Frequencies

Using Seek

Press the TRACK A key to play the previous/next frequency.

Using TUNE

Turn the **TUNE** knob to select the desired frequency.

- FM : Increases/decreased by 100kHz
- AM : Increases/decreased by 9kHz

Using Radio Mode

Selecting /Saving Presets

Press the Preset button to display the broadcast information for the frequency saved to each button.



Press the 1 ~ 6 buttons to play the desired preset.

* NOTICE

While listening to a frequency you want to save as a preset, press and hold one of the [1] ~ [6] preset buttons (over 0.8 seconds) to save the current frequency to the selected preset.

Auto Store

Press the A.store button to automatically save receivable frequencies to Preset buttons.

Scan

Press the SCAN key to preview frequencies with superior reception for 5 seconds each.

Press and hold the SCAN key (over 0.8 seconds) to preview presets for 5 seconds each.

* NOTICE

- Once scan is complete, the previous frequency will be restored.
- While Scan is operating, pressing the SCAN key will cancel the scan operation.

* NOTICE - USING THE DISCS

- This device has been manufactured to be compatible with software bearing the following logo marks.
- Do not clean discs with chemical solutions, such as record sprays, antistatic sprays, antistatic liquids, benzene, or thinners.
- After using a disc, put the disc back in its original case to prevent disc scratches.
- Hold discs by their edges or within the center hole to prevent damages to disc surfaces.
- Do not introduce foreign substances into the disc insert/eject slot. Introducing foreign substances could damage the device interior.
- Do not insert two discs simultaneously.
- When using CD-R/CD-RW discs, differences in disc reading and playing times may occur depending on the disc manufacturer, production method and the recording method as used by the user.

(Continued)

(Continued)

- Clean fingerprints and dust off the disc surface (coated side) with a soft cloth.
- The use of CD-R/CD-RW discs attached with labels may result in disc slot jams or difficulties in disc removal. Such discs may also result in noise while playing.
- Some CD-R/CD-RW discs may not properly operate depending on the disc manufacturer, production method and the record method as used by the user. If problems persist, trying using a different CD as continued use may result in malfunctions.
- The performance of this product may differ depending on the CD-RW Drive Software.
- Copy-protected CDs such as Stype CDs may not function in the device. DATA discs cannot be played. (However, such discs may still operate but will do so abnormally.)

(Continued)

(Continued)

- Do not use abnormally shaped discs (8cm, heart-shaped, octagonshaped) as such discs could lead to malfunctions.
- If the disc is straddled on the disc slot without removal for 10 seconds, the disc will automatically be re-inserted into the disc player.
- Only genuine audio CDs are supported. Other discs may result in recognition failure (e.g. copy CD-R, CDs with labels)

MP3 File Information

Supported Audio Formats

	ISO 9660 Level 1
File System	ISO 9660 Level 2
i iio Oyotoiii	Romeo / Juliet (128 characters)
	MPEG1 Audio Layer3
	MPEG2 Audio Layer3
Audio Compression	MPEG2.5 Audio Layer3
	Windows Media Audio Ver 7.X & 8.X

File formats that do not comply with the above formats may not be properly recognized or play without properly displaying file names or other information.

Support for Compressed Files

1. Supported Bitrates (Kbps)

	MPEG1	MPEG2	MPEG2.5	WMA
	Layer3	Layer3	Layer3	High Range
	32	8	8	48
	40	16	16	64
	48	24	24	80
	56	32	32	96
bps	64	40	40	128
E(k	80	48	48	160
λAΤ	96	56	56	192
BIT RATE(kbps)	112	64	64	
	128	80	80	
	160	96	96	
	192	112	112	
	224	128	128	
	256	144	144	
	320	160	160	

2. Sampling Frequencies (Hz)

•	MPEG1	MPEG2	MPEG2.5	WMA
•	44100	22050	11025	32000
	48000	24000	12000	44100
	3000	16000	8000	48000

- For MP3/WMA compression files, differences in sound quality will occur depending on the bitrate. (Higher sound quality can be experienced with higher bitrates.)
- This device only recognizes files with MP3/WMA extensions. Other file extensions may not be properly recognized.
- Maximum number of recognized folders and files
- Folder: 255 folders for CD, 2,000 folders for USB
- File: 999 files for CD, 6,000 files for USB
- * There are no limitations to the number of recognized folder levels

Language Support (Unicode Support)

- 1. English: 94 characters
- 2. Special characters and Symbols : 986 characters
- * Languages other than Korean and English (including Chinese) are not included.
- 3. Text Display (Based on Unicode)
 - File name: Maximum 64 English characters
 - Folder name: Max 32 English characters
- Using the scroll feature allows you to see the entire name of files with names that are too long to be displayed at once.

Compatibility by Disc Type

- Playing MIXED CDs: First plays the audio CD, then plays the compressed file(s).
- Playing EXTRA CDs: First plays the audio CD, then plays the compressed file(s).
- Playing multisession CDs: Plays in order of sessions
 - MIXED CD: CD type in which both MP3 and audio CD files are recognized in one disc.
 - Multisession CD CD type that includes more than two sessions. Different from Extra CDs, multisession CDs are recorded by sessions and have no media limitation.

• Precautions upon Writing CDs

- In all cases except when creating multisession discs, check the close session option before creating the disc. Though product malfunctions will not occur, some time may be required for the device to check whether the session state is closed (approximately 25 seconds). (Additional time may also be required depending on the number of folders or files.)
- Changing the MP3/WMA file extensions or changing files of other extensions to MP3/WMA may result in product malfunction.
- When naming files with MP3/WMA file extensions, write using only Korean and English. (Languages other than Korean and English are not supported and are displayed as blank.)
- 4. Unauthorized use or duplication of music files are prohibited by law.

 Prolonged use of CD-R/CD-RW discs that do not satisfy related standards and/or specifications could result in product malfunction.

MEDIA MODE

-

Switching to Media Mode (for *Bluetooth®* Wireless Technology equipped model)

Pressing the MEDIA key will change the operating mode in order of CD → USB (iPod) → AUX → My Music → BT Audio.



If [Pop-up Mode] / [Mode Pop-up] is turned on within SETUP ▶ [Display], then pressing the MEDIA key will display the Media Pop-up Mode screen.

Turn the ©TUNE knob to move the focus. Press the knob to select.

MEDIA MODE

-

Switching to Media Mode

Pressing the MEDIA key will change the operating mode in order of CD-USB(iPod)-AUX-My Music.



If [Pop-up Mode] / [Mode Pop-up] is turned on within SETUP > [Display], then pressing the MEDIA key will display the Media Pop-up Mode screen.

Turn the **TUNE** knob to move the focus. Press the knob to select.

* NOTICE

The media mode pop up screen can be displayed only when there are two or more media modes turned on.

Title Icon

When a *Bluetooth®* Wireless Technology, iPod, USB, or AUX device is connected or a CD is inserted, the corresponding mode icon will be displayed.

BT Audio № ⊙ - 12:1:			
Icon	Title		
*	Bluetooth® Wireless Technology		
0	CD		
•	iPod		
•	USB		
Ò	AUX		

AUDIO CD MODE

Basic Mode Screen



<for RDS model>



1. Mode

Displays currently operating mode

2. Operation State

From Repeat/Random(Shuffle)/ Scan, displays the currently operating function

3. Track Info

Displays information about the current track

4. Play/Pause

Changes the play/pause state

5. Play Time

Displays the current play time

6. Info

Shows detailed information about the current track

7. Random(Shuffle)

Turns the Random(Shuffle) feature on/off

8. Repeat

Turns the Repeat feature on/off

9. List

Moves to the list screen

Using Audio CD Mode

Playing/Pausing CD Tracks

Once an audio CD is inserted, the mode will automatically start and begin playing.



<for RDS model>



While playing, press the button to pause and press button to play.

* NOTICE

- Only genuine audio CDs are supported. Other discs may result in recognition failure (e.g. copy CD-R, CDs with labels)
- The artist and title information are displayed on the screen if track information is included within the audio CD.

Changing Tracks

Press the V SEEK A key to move to the previous or next track.

* NOTICE

- Pressing the SEEK key after the track has been playing for 3 seconds will start the current track from the beginning.
- Pressing the TRACK key before the track has been playing for 3 seconds will start the previous track.

Selecting from the List

Turn the **TUNE** knob left/right to search for the desired track.



Once you find the desired track, press the ©TUNE knob to start playing.

Rewinding / Fast-forwarding Tracks

While playing, press and hold the SEEK key (over 0.8 seconds) to rewind or fast-forward the current track.

Scan

Press the SCAN key to play the first 10 seconds of each file.

Audio CD Mode Menu

Within this mode, you will have access to the Info, Random(Shuffle), Repeat and List features.



<for RDS model>



Info

Press the (Info)button to display details about the current disc.

Random(Shuffle)

Press the (Shuffle) button to play tracks in random(Shuffle) order.

Press the button again to turn the Random(Shuffle) feature off.

 Random(Shuffle): Plays all tracks in random(Shuffle) order.

Repeat

Press the (Repeat) button to repeat the current track. Press the button again to turn the repeat feature off.

• Repeat: Repeats the current track.

List

Press the (List)button to display the track list screen.



Turn the ©TUNE knob left/right to search for tracks. Once the desired track is displayed, press the knob to select and play.

MP3 CD MODE

Basic Mode Screen



<for RDS model>



1. Mode

Displays currently operating mode.

2. Operation State

From Repeat/Random(Shuffle)/ Scan, displays the currently operating function

3. File Index

Displays the current file number

4. File Info

Displays information about the current file

5. Play/Pause

Changes the play/pause state

6. Play Time

Displays the current play time

7. Info

Shows detailed information about the current file

8. Random(Shuffle)

Turns the Random(Shuffle) feature on/off

9. Repeat

Turns the Repeat feature on/off

10. Copy

Copies the current file into My Music

11. List

Moves to the list screen

Using MP3 CD Mode

Playing/Pausing MP3 Files

Once an MP3 disc is inserted the mode will automatically start and being playing.



<for RDS model>



While playing, press the button to pause and press button to play.

* NOTICE

If there are numerous files and folders within the disc, reading time could take more than 10 seconds and the list may not be displayed or song searches may not operate. Once loading is complete, try again.

Changing Files

Press the V SEEK A key to move to the previous or next file.

* NOTICE

- Pressing the SEEK Key after the file has been playing for 3 seconds will start the current file from the beginning.
- Pressing the SEEK key before the file has been playing for 3 seconds will start the previous file.

Selecting from the List

Turn the **TUNE** knob left/right to search for the desired file.



Once you find the desired file, press the ©TUNE knob to start playing.

Rewinding / Fast-forwarding Files
While playing, press and hold the

SEEK A key (over 0.8 seconds) to
rewind or fast-forward the current file.

Scan

Press the SCAN key to play the first 10 seconds of each file.

Searching Folders

Press the V FOLDER (VFOLDER ^) key to select and search folders.

Once the desired folder is displayed, press the ©TUNE knob to select.



The first file within the selected folder will begin playing.

MP3 CD Mode Menu

Within this mode, you will have access to the Info, Random(Shuffle), Repeat, Copy and List features.



<for RDS model>



Info

Press the (Info)button to display details about the current file.

* NOTICE

- When the 'Folder File' option is set as the default display within Display setup, the album/artist/file information are displayed as detailed file information.
- When the 'Album Artist Song' option is set as the default display, the folder name/file name are displayed as detailed file information.
- The title, artist and album info are displayed only when such information are recorded within the MP3 file ID3 tag.

Random(Shuffle)

Press the (Shuffle) button to play files in random(Shuffle) order.

Each time the button is pressed, the feature changes in order of Random (Shuffle) Folder → Random (Shuffle) All→ Off.

- Random(Shuffle) Folder: Plays all files within the current folder in Random (Shuffle) order.
- Random(Shuffle) All: Plays all files in Random(Shuffle) order.

Repeat

Press the (Repeat) button to repeat the current file or folder.

Each time the button is pressed, the feature changes in order of Repeat →Repeat Folder→Off.

- Repeat: Repeats the current file.
- Repeat Folder: Repeats all files within the current Folder.

Copying Files

Press the (Copy button to copy the current file into My Music.

* NOTICE

Selecting another feature during copying will display a pop-up asking whether you wish to cancel copying. To cancel, select 'Yes'.

List

Press the (List)button to display the file list screen.



Turn the **©**TUNE knob left/right to search for files. Once the desired file is displayed, press the knob to select and play.

* NOTICE - USING THE USB DEVICE

- Connect the USB device after turning on the engine. The USB device may become damaged if it is already connected when the ignition is turned on. The USB device may not operate properly if the car ignition is turned on or off with the USB device connected.
- Heed caution to static electricity when connecting/disconnecting USB devices.
- Encoded MP3 Players will not be recognized when connected as an external device.
- When connecting an external USB device, the device may not properly recognize the USB is in some states.
- Only products formatted with byte/sectors under 64Kbyte will be recognized.
- This device recognizes USB devices formatted in FAT 12/16/32 file formats. This device does not recognize files in NTFS file format.

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- Some USB devices may not be supported due to compatibility issues.
- Avoid contact between the USB connector with bodily parts or foreign objects.
- Repeated connecting/disconnecting of USB devices within short periods of time may result in product malfunction.
- A strange noise may occur when disconnecting the USB.
- Make sure to connect/disconnect external USB devices with the audio power turned off.
- The amount of time required to recognize the USB device may differ depending on the type, size or file formats stored in the USB. Such differences in time are not indications of malfunctions.
- The device only supports USB devices used to play music files.
- USB images and videos are not supported.

(Continued)

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- Do not use the USB I/F to charge batteries or USB accessories that generate heat. Such acts may lead to worsened performance or damage to the device.
- The device may not recognize the USB device if separately purchased USB hubs and extension cables are being used. Connect the USB directly with the multimedia terminal of the vehicle.
- When using mass storage USB devices with separate logical drives, only files saved to the root drive can be played.
- Files may not properly operate if application programs are installed to the USBs.
- The device may not operate normally if MP3 Players, cellular phones, digital cameras, or other electronic devices (USB devices not recognized as portable disk drives) are connected with the device.

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- Charging through the USB may not work for some mobile devices.
- The device may not support normal operation when using a USB memory type besides (Metal Cover Type) USB Memory.
- The device may not support normal operation when using formats such as HDD Type, CF, or SD Memory.
- The device will not support files locked by DRM (Digital Rights Management.)
- USB memory sticks used by connecting an Adaptor (SD Type or CF Type) may not be properly recognized.
- The device may not operate properly when using USB HDDs or USBs subject to connection failures caused by vehicle vibrations.
 (e.g. i-stick type)

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 Avoid use of USB memory products that can also be used as key chains or mobile phone accessories. Use of sucl



accessories. Use of such products may cause damage to the USB jack.

 Connecting an MP3 device or phone through various channels, such as AUX/BT or Audio/USB mode may result in pop noises or abnormal operation.

USB MODE

Basic Mode Screen



<for RDS model>



1. Mode

Displays currently operating mode

2. Operation State

From Repeat/Random(Shuffle)/ Scan, displays the currently operating function

3. File Index

Displays the current file number

4. File Info

Displays information about the current file

5. Play/Pause

Changes the play/pause state

6. Play Time

Displays the current play time

7. Info

Displays detailed information for the current file

8. Random(Shuffle)

Turns the Random(Shuffle) feature on/off

9. Repeat

Turns the Repeat feature on/off

10. Copy

Copies the current file into My Music

11. List

Moves to the list screen

Using USB Mode

Playing/Pausing USB Files

Once a USB is connected, the mode will automatically start and begin playing a USB file.



<for RDS model>



While playing, press the button to pause and press button to play.

* NOTICE

- Loading may require additional time if there are many files and folders within the USB and result in faulty list display or file searching. Normal operations will resume once loading is complete.
- The device may not support normal operation when using a USB memory type besides (Metal Cover Type) USB Memory.

Changing Files

Press the Frack keys to move to the previous or next file.

* NOTICE

- Pressing the TRACK key after the file has been playing for 3 seconds will start the current file from the beginning.
- Pressing the TRACK key before the file has been playing for 3 seconds will start the previous file.

Selecting from the List

Turn the **TUNE** knob left/right to search for the desired file.



Once you find the desired file, press the **QTUNE** knob to start playing.

Rewinding / Fast-forwarding Files

While playing, press and hold the SECK key (over 0.8 seconds) to rewind or fast-forward the current file.

Scan

Press the SCAN key to play the first 10 seconds of each file.

Searching Folders

Press the PTY (FOLDER)key to select and search folders.



Once the desired folder is displayed, press the TUNE knob to select. The first file within the selected folder will begin playing.

USB Mode Menu

Within this mode, you will have access to the Info, Random(Shuffle), Repeat, Copy and List features.



<for RDS model>



Info

Press the *i* (Info)button to display details about the current file.

* NOTICE

- When the 'Folder File' option is set as the default display within Display setup, the album/artist/file information are displayed as detailed file information.
- When the 'Album Artist Song' option is set as the default display, the folder name/file name are displayed as detailed file information.
- The title, artist and album info are displayed only when such information are recorded within the MP3 file ID3 tag.

Random(Shuffle)

Press the (Shuffle) button to play files in random(Shuffle) order.

Each time the button is pressed, the feature changes in order of Random(Shuffle) Folder→Random (Shuffle) All→Off.

- Random(Shuffle) Folder: Plays the files in the current folder in random(Shuffle) order.
- Random(Shuffle) All: Plays all files in random(Shuffle) order.

Repeat

Press the (Repeat) button to repeat the current file or folder.

Each time the button is pressed, the feature changes in order of Repeat→ Repeat Folder → Off.

- Repeat (Icon): Repeats the current file.
- Repeat Folder (Icon): Repeats all files within the current folder.

Copying Files

Press the (Copy) button to copy the current file into My Music.

* NOTICE

Selecting another feature during copying will display a pop-up asking whether you wish to cancel copying. To cancel, select 'Yes'.

List

Press the (List)button to display the file list screen.



Turn the ©TUNE knob left/right to search for files. Once the desired file is displayed, press the knob to select and play.

* NOTICE - USING THE iPod® DEVICE

- iPod® is a registered trademark of Apple Inc.
- In order to use the iPod while operating the keys, you must use a dedicated iPod cable. (the cable that is supplied when purchasing iPod/iPhone products)
- If the iPod is connected to the vehicle while it is playing, a high pitch sound could occur for approximately 1-2 seconds immediately after connecting. If possible, connect the iPod to the vehicle with the iPod stopped/paused.
- During ACC ON state, connecting the iPod through the iPod cable will charge the iPod through the car audio system.
- When connecting with the iPod cable, make sure to fully insert the jack to prevent communication interference.

(Continued)

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- When the EQ features of an external device, such as the iPod, and the audio system are both active, EQ effects could overlap and cause sound deterioration and distortion. Whenever possible, turn off the EQ feature within the external device upon use by connecting with the audio system.
- Noise may occur when an iPod or AUX device is connected. When such devices are not being used, disconnect the device for storage.
- When the iPod or AUX device power is connected to the power jack, playing the external device may result in noise. In such cases, disconnect the power connection before use.
- Skipping or improper operation may occur depending on the characteristics of your iPod/Phone device.
- If your iPhone is connected to both the Bluetooth® Wireless Technology and USB, the sound may not be properly played. In your iPhone, select the Dock connector or Bluetooth® Wireless Technology to change the sound output (source).

(Continued)

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- iPod mode cannot be operated when the iPod cannot be recognized due to the playing of versions that do not support communication protocols, cases of iPod abnormalities and defects.
- For fifth generation iPod Nano devices, the iPod may not be recognized when the battery level is low. Please charge the iPod for use.
- Search/play orders shown within the iPod device may differ with the orders shown within the audio system.
- If the iPod malfunctions due to an iPod device defect, reset the iPod and try again. (To learn more, refer to your iPod manual)
- Some iPods may not sync with the System depending on its version. If the Media is removed before the Media is recognized, then the system may not properly restore the previously operated mode. (iPad charging is not supported.)

iPod MODE

Basic Mode Screen



<for RDS model>



1. Mode

Displays currently operating mode

2. Operation State

From Repeat/Random(Shuffle), displays the currently operating function

3. Song Index

Displays the current song/total number of songs

4. Song Info

Displays information about the current song

5. Play/Pause

Changes the play/pause state

6. Play Time

Displays the current play time

7. Random(Shuffle)

Turns the Random(Shuffle) feature on/off

8. Repeat

Turns the Repeat feature on/off

9. List

Moves to the list screen

Using iPod Mode

Playing/Pausing iPod Songs

Once an iPod is connected, the mode will automatically start and begin playing an iPod song.



<for RDS model>



While playing, press the button to pause and press button to play.

* NOTICE

iPods with unsupported communication protocols may not properly operate in the audio system.

Changing Songs

Press the V SEEK A key to move to the previous or next song.

* NOTICE

- Pressing the SEEK RACK key after the song has been playing for 3 seconds will start the current song from the beginning.
 Pressing the RACK key before
- Pressing the TRACK key before the song has been playing for 3 seconds will start the previous song.
- Slight time differences may exist depending your iPod product.

Rewinding / Fast-forwarding Songs

While playing, press and hold the SEEK key (over 0.8 seconds) to rewind or fast-forward the current song.

Searching Categories

Turn the **TUNE** knob left/right to search for the desired category.



<for RDS model>



Once you find the desired category, press the **TUNE** knob to select and play.

* NOTICE

There are eight categories that can be searched, including Playlists, Artists, Albums, Genres, Songs, Composers, Audiobooks and Podcasts.

Category Menu

Within the iPod Category menu, you will have access to the , Home, and features.



<for RDS model>



1. Displays the play screen

2. Home: Moves to the iPod root category screen

3. Noves to the previous category

* NOTICE

- If the search mode is accessed while playing a song, the most recently searched category is displayed.
- Search steps upon initial connection may differ depending on the type of iPod device.

iPod Mode Menu

Within this mode, you will have access to the Random(Shuffle), Repeat and List features.



<for RDS model>



Random(Shuffle)

Press the (Shuffle) button to play songs in random(Shuffle) order. Each time the button is pressed, the feature changes in order of Random(Shuffle) Album→Random (Shuffle) All→Off.

- Random(Shuffle) Album : Shuffle Album plays album in Random(Shuffle) order.
- Random(Shuffle) All: Plays all songs in Random(Shuffle) order.

Repeat

Press the (Repeat)button to repeat the current song. Press the button again to turn the repeat feature off.

• Repeat : Repeats the current song

List

Press the (List)button to display the Category Menu.



<for RDS model>



Turn the **TUNE** knob left/right to search for the desired category.

Once you find the desired category, press the ©TUNE knob to select and play.

AUX MODE

Using AUX Mode

Press the MEDIA key ► Select [AUX]



An external device can be connected to play music.

Connecting an External Device

External audio players (Camcorders, car VCR, etc.) can be played through a dedicated cable.

* NOTICE

- If an external device connector is connected with the AUX terminal, then AUX mode will automatically operate. Once the connector is disconnected, the previous mode will be restored.
- AUX mode can be used only when an external audio player (camcorder, car VCR, etc.) has been connected.
- The AUX volume can be controlled separately from other audio modes.
- Connecting a connector jack to the AUX terminal without an external device will convert the system to AUX mode, but only output noise. When an external device is not being used, also remove the connector jack.
- When the external device power is connected to the power jack, playing the external device may output noise. In such cases, disconnect the power connection before use.
- Fully insert the AUX cable to the AUX jack upon use.

MY MUSIC MODE

Basic Mode Screen



<for RDS model>



1. Mode

Displays currently operating mode

2. Operation State

From Repeat/Random(Shuffle)/ Scan, displays the currently operating function

3. File Index

Displays the current file/total number of files

4. File Info

Displays information about the current file

5. Play/Pause

Changes the play/pause state

6. Play Time

Displays the current play time

7. Info

Displays detailed information for the current file

8. Random(Shuffle)

Turns the Random(Shuffle) feature on/off

9. Repeat

Turns the Repeat feature on/off

10. Delete

Deletes the current file

11. List

Moves to the list screen