ATTACHMENT E.

- User Manual -

DIGITAL NAVIGATION SYSTEM

HYUNDAI

DIGITAL NAVIGATION SYSTEM

User's Manual

SONATA

User's Manual

HYUNDAI

Preface

Thank you for purchasing this Audio Navigation System.

This user's manual explains how to use the Hyundai Motor Audio Navigation System.
Before using the product, read the contents of this user's manual carefully and use this product safely.

- The screens shown in this manual may differ with the actual screens of the product.
- The design and specification of this product may change without prior notification for product improvement.
- When transferring the vehicle to another individual, include this user's manual so that the next driver can continue its use.

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NAVTEQ ON BOARD.

((XM)) Bluetooth MP3

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PART 1 **PRE-OVERVIEW**

Introduction

Important information about this manual

This user manual contains instructions related to safety. Closely observe and comply with all of the safety instructions found within this manual.

⚠ WARNING !

Disobeying the warnings listed within this user's manual may cause fatal or serious injuries. Warnings indicate matters which may directly lead to accidents.

⚠ CAUTION!

Disobeying the cautions listed within this user manual may lead to accidents or cause injury. Cautions indicate matters which may lead to vehicle damage or malfunction.

INFORMATION

Information which the user must be aware or allows for more convenient use of the device.

Precaution for safe usage

⚠ WARNING !

- Do not operate the Audio Navigation system while driving.
- Do not disassemble, assemble, or modify the Audio Navigation system.
- Do not watch the screen for prolonged periods of time while driving.
- Set the volume to a level which allows the driver to be aware of external conditions.

⚠ CAUTION!

- Do not operate the Audio Navigation system for prolonged periods of time with the vehicle ignition in ACC. Such operations may lead to battery discharge.
- Be cautious not to spill water or introduce foreign objects into the device.
- Do not cause severe shock to the device. Direct pressure onto the front side of the monitor may cause damage to the LCD or touch panel.
- In case of product malfunction, please contact your place of purchase or service center.
- When cleaning the touch screen, make sure to turn off the device and use a dry and smooth cloth. Never use tough materials, chemical cloths, or solvents (alcohol, ammonia, benzene, thinners, etc.) as such materials may damage the device panel or cause color and quality deterioration.

Reference Page

This indicates the title and page that you should refer to.

This indicates a key on the control panel.

Voice Command

This indicates an operation by voice command.

Controller and functions

Control panel

1 Power / Volume control knob
- Push knob (over 0.8 second) : turns the power off.
- Push knob (under 0.8 second) : each time the knob is pressed, the Audio is turned on and off.
- Tune knob : the range of volume adjustment is between 0 ~ 35.

2 FM/AM
Each press will change the bands in the following order: FM1 → FM2 → AM → FM1 ...

3 XM
Each press will change the bands in the following order: XM1 → XM2 → XM3 → XM1 ...

4 SEEK/TRACK Up/Down
- SHORT KEY(less than 0.8 second)
  - FM/AM Mode : automatically searches for the previous or next broadcast frequency and starts playing.
  - XM Mode : receives the previous or next channel.
  - CD Mode : plays the previous or next track.
  - MP3, USB Mode : Plays the previous or next file.
  - iPod Mode : plays the previous or next song.
- LONG KEY(over 0.8 second)
  - FM/AM Mode : quickly moves through the frequencies while the button is pressed. Once released, automatically searches for broadcasts which can be received.
  - XM Mode : quickly moves to the previous or next channel.
  - CD Mode : REW/FF the current playing track.

5 MEDIA
Each press will change the bands in the following order: DISC(CD, MP3) → (USB or iPod) → (AUX) → (Phone Music) → DISC(CD, MP3)...

  - MP3, USB Mode : REW/FF the current playing file.
  - iPod Mode : REW/FF the current playing song.

6 PHONE
Displays the Bluetooth handsfree screen.

7 DISP
DISP displays the displays setting screen.

8 MAPVOICE
Displays the map screen for the current position.

9 ROUTE
Displays the Route menu screen.

10 DEST
Displays the displays setting screen.

11 TUNE
- FM/AM Mode : push the key to search for the desired frequency. Press the key to receive the selected frequency.
- XM Mode : push the key to search for the desired channel. After a brief moment, the selected channel will be displayed.
- CD Mode : push the key to search for the desired track. Press the key to play the selected track.
- MP3, USB Mode : push the key to search for the desired file. Press the key to play the selected file.
- iPod Mode : push the key to search for the desired song. Press the key to play the selected song.

12 SETUP
Displays the Setup menu screen.

13 ENTER
Completes the command.

14 RESET
Resets the system - if software locks-up.

INFORMATION

If pressing the power off knob for over 0.8 second and the system does not shut down, carefully use a straightened paper clip at the access hole shown next to the right DISC indicator LED to reset the software.
The system power will shut-off and restart.

15 Clock
- Short Key (under 0.8 second)
  - When the screen is turned on : displays the current time in the center of the screen.
  - When the screen is turned off : turns the full clock screen on and off.
- Long Key (over 0.8 second)
  - Displays the clock setting screen.

16 DISC eject
Ejects the inserted disc.

17 DISC insert indicator LED
Displays whether a DISC has been inserted.

Steering wheel remote controller

❶ MODE

Each time the Mode key is pressed, the mode changes in the following order: FM1 → FM2 → AM → XM1 → XM2 → XM3 → (DISC) → (USB or iPod) → (AUX) → (Phone Music) → FM1 ...

If an unsupported DISC is inserted, if there is no disc, or if an external device (e.g. iPod, USB memory stick, etc.) has not been connected, the mode will not be recognized and automatically switch to the next mode.

- Press this key for over 0.8 second to turn the Audio ON and OFF.
- Press this key when the Power is turned off to turn the power on.

❷ Volume Up/Down

Increases or decreases the volume within a range between 0 ~ 35. Volume for navigation and voice guidance can be adjusted in the setup mode.

❸ Seek Up/Down

- SHORT KEY(less than 0.8 second)
  - FM/AM : receives the previous or next preset frequency.
  - XM Mode : receives the previous or next preset channel.
  - CD Mode : plays the previous or next track.
  - MP3, USB Mode : plays the previous or next file.
  - iPod Mode : plays the previous or next song.
- LONG KEY(Over 0.8 second)
  - FM/AM Mode : quickly moves through the frequencies while the key is pressed. Once released, automatically searches for broadcasts which can be received.
  - XM Mode : quickly moves to the previous or next channel.
  - CD Mode : REW/FF the current playing track.
  - MP3, USB Mode : REW/FF the current playing file.
  - iPod Mode : REW/FF the current playing song.

❹ Voice Recognition

Starts Voice Recognition.

❺ CALL

Press this key to receive an incoming call. If pressed while in AV/Navigation mode, the bluetooth handsfree screen will be displayed.

❻ END

Press this key to reject an incoming call.
If pressed while on a call, then the call will be ended.

PART 1 PRE-OVERVIEW

Basic operation and setting

Turning the Power ON

1. Turn the ignition key onto ACC or ON. If the system power had been on when the ignition was turned off, the system will turn back on automatically.

2. If the system power had been off when the ignition was turned off, the system will remain off. In this case, press the PWR/VOL knob to turn on the system power.

System Power ON

INFORMATION

As system booting starts from the point the door lock is unlocked, the device may complete booting before the ACC is turned on or the PWR/VOL knob is pressed.
Consequently, the booting screen may not be displayed upon initially turning on the system power.

3. Once system booting is complete, the most recent operated mode will be displayed. For example, turning on the system will display FM1 radio mode if the last operated mode prior to turning off the system had been FM1 radio mode.

Turning the Power OFF

If the PWR/VOL knob is pressed for over 0.8 second, a beep will sound and the system power will be turned off.

Turning the Audio ON/OFF

Press the PWR/VOL knob for under 0.8 second with the system power on to turn the Audio on and off.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "AV On"
   "AV Off"

INFORMATION

Conducting the following operations while the AUDIO is off will automatically turn on the Audio system.

- Pressing the AV related keys (FM/AM, XM, MEDIA).
- Inserting a DISC or connecting an external device.

Adjusting audio volume

Turn the PWR/VOL knob in clockwise direction to increase the volume and counter-clockwise to decrease the volume.

INFORMATION

- The range of volume adjustment is between 0 ~ 35.
- Adjustments to the volume cannot be made while the AUDIO is turned off.

How to operate the screen menu

Operating typical screen menu

- If a menu button on the screen is pressed, the corresponding function will begin operation.
- The same menu button may perform different functions depending on the length of time the button is pressed (under 0.8 seconds or over 0.8 second). For more information, refer to the specific function within this user manual.
- The current operated button will be highlighted upon display.
- Buttons which cannot be operated under the current conditions will be displayed in disabled state. Pressing a disabled button will not perform any operation.

Inputting letter by using screen keyboard

ABC : Displays the English alphabet keypad.
ÀÇÈ : Displays the French alphabet keypad. (if available)
0 - 9 : Displays the number and symbol keypad.
Delete : Deletes the previously inputted letter. Pressing for over 0.8 second will delete all content.
Done : The input is completed.
⬅ : Restores to previous screen. The inputted text will not be saved.

Displaying the list

List : Even if input is not complete, the current matching items from the database will be displayed.

INFORMATION

The number at the upper-right side of the screen displays the number of current matches.

PART 1 PRE-OVERVIEW

Selecting an item in a list

▲ ▼ : Moves to the next page or previous page.
▶ ◀ : The ▶ button will be displayed if the text is too long to be displayed in one button.

Press the ◀ button to move the cursor to the end of the text. Press the ◀ button to move the cursor to the front of the text.

Sorting items from list

Select the desired sorting method to reorganize the list in accordance to the selected method.

How to operate menu by voice command

Conditions for voice recognition system

Most of the functions within the AV and Navigation system can be operated by voice. Please follow the instructions below for optimal voice recognition performance.

- Close all windows and the sunroof. The voice recognition can be improved when in a quiet environment.
- Press the voice recognition button and say the desired voice command after the sound of the beep.
- The microphone is positioned above the driver so that voice commands can be said while maintaining a proper posture.
- Pronounce the voice commands naturally and clearly as if in normal conversation.

Giving voice command

1. Press the key on the steering wheel remote controller.
   A voice command window will be displayed on the lower side of the screen followed by a "Command please" system voice comment.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say the desired voice command.
   [Voice command list], page 5-6.
   [Searching a destination by voice command], page 5-19.

INFORMATION

Press the key shortly to input the desired voice command. The system voice instruction comment will immediately terminate. When the icon changes into the icon with a beep sound, it is possible to input voice commands.

Sound setting

Press the Sound button on the main screen of each AV mode (FM/AM, XM, CD, MP3, USB, iPod) to display the Sound setting screen.

FAD/BAL

The position of the sound can be adjusted by using the up-down and left-right (▲, ▼, ▶, ◀) buttons on the left side of the screen.
Press the Center button to position the sound in the center of the vehicle.

PART 1 PRE-OVERVIEW

BASS/MID/TREB

The BASS/MID/TREB can be adjusted by using the left/right buttons (◀, ▶) of each control.

Auto volume control ON/OFF

Each time the Auto volume control button is pressed, the Auto volume control function is turned on or off.

INFORMATION

The Auto Volume Control is a function which automatically adjusts the volume level in accordance to changes in vehicle speed.

Touch screen beep ON/OFF

Each time the Touch screen beep button is pressed, the beeping sound that follows each press on the screen will turn on or off.

Variable EQ Setup (Optional)

Operating Variable EQ

1. Press the Variable EQ button at the top of the Sound screen.

2. Within the <Variable EQ> screen, three types of EQ setups such as Normal, Dynamic, Concert can be selected.

3. Press the Detail button to view specific information on the three EQ settings.

INFORMATION

The Variable EQ feature may not be supported in some vehicle models and tuner mode.

Display setting

Press the DISP key on the control panel to display the Setup menu screen.

Display mode

Press the button for the desired display mode from Automatic, Daylight, and Night modes. The current selected mode is highlighted.

- Automatic
  The display is automatically converted between Daylight and Night modes in accordance to the on/off state of the vehicle taillights.
- Daylight
  The bright screen is always maintained regardless of the on/off state of the vehicle taillights.
- Night
  The dark screen is always maintained regardless of the on/off state of the vehicle taillights.

Brightness

Use the left/right buttons (◀, ▶) for control to make adjustments.

Display OFF

Press the Display Off button.

Display ON

Press anywhere on the black screen.
The screen prior to display setting will be displayed.

Viewing Current Time

Press the ⏲ on the front panel shortly (under 0.8 second) to display the current time at the center of the screen.

INFORMATION

If the screen is turned off, selecting the ⏲ will display the current time on the entire screen.

Setting the Clock

Press and hold the ⏲ on the front panel shortly (over 0.8 second) to display the Clock setting screen.

- **GPS Time**
  The time received from the GPS will be displayed automatically.
- **Clock Type**
  Selects the clock type shown as the entire screen when the system power is turned off.
- **Time Format**
  When the clock type is digital, this button is used to convert the time between 12 hour/ 24 hour systems.
- **Daylight Saving Time**
  Turns the Daylight Saving Time function on or off.

INFORMATION

Clock setting mode can be displayed while the clock is displayed on the screen even when the system is turned off.

Setting Display OFF

Display Photo Frame

1. Press the Photo Frame setup button in the DISPLAY setup screen.

2. Press the Photo Frame button in the <Setting Display Off> setup screen.

3. The registered image will be displayed once power is turned off.

INFORMATION

For Photo Frame setup, the frame must be set in USB Image mode. (For details on setting the Photo Frame, refer to the USB IMAGE page.)

4. To delete an image registered as a frame, press the Delete Photo button.

PART 2 **AUDIO SYSTEM**

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AUDIO SYSTEM

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Operating the radio

FM/AM Radio

Listening to the FM/AM radio

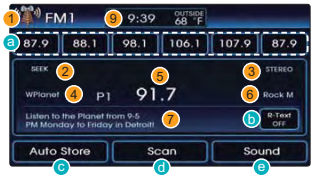
1. Press the FM/AM key on the control panel. The FM/AM radio band of the most recent listened station will be displayed.
2. Press the FM/AM key to change the desired radio band. Each press will change the bands in the following order: FM1 → FM2 → AM → FM1 ...
3. Select the desired broadcast frequency.

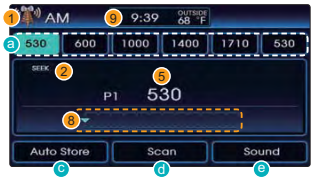
[Selecting FM/AM broadcast frequency], page 2-3.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
" Radio"
"(Radio) AM"
"(Radio) FM"
"(Radio) FM <1 or 2>"
"AM Frequency <530 to 1710>"
"FM Frequency <87.5 to 107.9>"
"AM Preset <1 to 6>"
"FM <1 or 2> Preset <1 to 6>"

FM/AM screen and functions





1. Mode display : displays the FM1/FM2/ AM modes.
2. SEEK/SCAN/PRESET SCAN/AUTO PRESET indicator : if SEEK/SCAN/PRESET SCAN / AUTO PRESET is operating, the switch is displayed.

3 STEREO indicator : if the current frequency is a stereo broadcast, the indicator is displayed.
4 Program Service name : displays the program service name if data is being broadcast.
5 Frequency : displays the current playing frequency.
6 Program type name : displays the program type name if data is being broadcast.
7 Radio Text : displays the radio text information if data is being broadcast.
8 Frequency Bar : displays the position of the current frequency within the total frequency range.
9 Current time : displays the current time manually automatically according to the GPS time.

a Preset buttons : the desired frequency can be preset and selected.
[Storing FM/AM preset], page 2-4.
b R-Text ON/OFF button : turns the Radio Text information on and off.

INFORMATION

If the R-Text is on OFF state, text will not be displayed even if there is text being transmitted from the broadcast station.
If the R-Text is on ON state, the frequency bar will not be displayed. Even if the R-Text in on ON state, text may not be displayed if text is not being received from the broadcast station.

c Auto Store button : searches the 6 frequencies with the most superior reception and automatically stores as preset buttons in corresponding order.
[Storing FM/AM preset], page 2-4.
d Scan button : scans all frequencies or just the preset frequencies for 5 seconds each. [Scanning FM/AM broadcast frequency], page 2-5.
e Sound button : adjusts the FAD/BAL, BASS/MID/TREB controls.
[Sound setting], page 1-10.

Selecting FM/AM broadcast frequency

There are 3 ways to select the broadcast frequency - (a) selecting through preset, (b) selecting through SEEK, (c) selecting through manual search.

(a) Selecting a frequency through preset

Press the preset button of the desired broadcast frequency.

INFORMATION

- Press the VSEEK or TRACK∧ keys on the steering wheel remote controller shortly. The preset frequencies of the current band will be selected in order.
- There are 6 preset frequencies each for FM1, FM2, and AM modes.

[Storing FM/AM preset], page 2-4.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
"Preset <1 to 6>"
"Preset Up"
"Preset Down"

PART 2 AUDIO SYSTEM

(b) Selecting a Broadcast frequency through SEEK

Press the VSEEK or TRACK∧ keys on the control panel for less than 0.8 second.
Once the SEEK function is operating (SEEK indicator blinking), the next or previous broadcast frequency with superior reception will be searched automatically.

INFORMATION

- Press the VSEEK or TRACK∧ keys on the control panel or steering wheel remote controller for more than 0.8 second to quickly move to the nearest desired frequency. Once the button is released, the next frequency with superior reception will be searched automatically.
- If the SEEK function is operating, pressing the VSEEK or TRACK∧ keys on the control panel again will terminate SEEK operation and select the current frequency.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
"Seek Up"
"Seek Down"

(c) Selecting a broadcast frequency through manual search

Turn the VTUNE∧ key on the control panel in clockwise or counter-clockwise direction.
Each click on the VTUNE∧ key will increase or decrease the frequency by 1 step (FM: 0.2 MHz, AM: 10 kHz).

Storing FM/AM preset

There are 2 ways to store preset frequencies - (a) storing manually and (b) auto store.

(a) Storing manually

1. Select the desired frequency.
[Selecting FM/AM broadcast frequency], page 2-3.
2. Press the preset button to store for over 0.8 second. The frequency will become stored along with a beep sound.

INFORMATION

Six preset frequencies each for FM1/ FM2/AM modes can be stored using the above instructions.

(b) Auto store

After selecting the desired band, press the Auto store button. The 6 frequencies with the most superior reception will be stored as preset buttons in corresponding order.

INFORMATION

If the Auto store button is pressed again while operating Auto Store, then the Auto Store operation will be terminated and the previously played frequency will be restored.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Auto preset"

Scanning FM/AM broadcast frequency

1. Press the Scan button.
   - SCAN (less than 0.8 second) : scans all frequencies and plays only frequencies with superior reception for 5 seconds each.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Scan"

- PRESET SCAN (over 0.8 second): scans the 6 frequencies stored as preset frequencies in the current band for 5 seconds each.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Preset Scan"

2. Press the Scan button again to continue listening to a frequency. The scan will be terminated and the current frequency will continue to be played.

INFORMATION

When scanning has completed an entire revolution, the scan function will terminate automatically and the previous played frequency will be restored.

PART 2 AUDIO SYSTEM

XM radio

Listening to the XM radio

1. Press the XM key on the control panel. The XM radio band screen of the most recent listened station will be displayed.

2. Press the XM key to change the desired radio band. Each press will change the bands in the following order: XM1 → XM2 → XM3 → XM1 ...

3. Select the desired broadcast channel.
   [Selecting XM broadcast channel], page 2-7.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "XM"
   "XM <1 or 2 or 3>"
   "XM Channel <0 to 255>"
   "XM <1 or 2 or 3> Preset <1 to 6>"

XM screen and functions

1. Mode display : displays the XM1/XM2/XM3 modes.
2. SCAN/PRESET SCAN indicator : if SCAN/PRESET SCAN is operating, the switch is displayed.
3. Channel number : displays the current playing channel.
4. Channel mode indicator : displays the channel mode in orange.
5. Category mode indicator : displays the category mode in orange.
6. Channel name : displays the channel name.
7. NAME : displays the artist and other related information.
8. Title name : displays the title name.
9. Category name : displays the category name.
10. Current time : displays the current time manually automatically according to the GPS time.

a. Preset buttons : the desired channel can be preset and selected. [Storing XM preset], page 2-9.
b. Mode buttons : switches between channel mode and category mode.
   [Switching the XM mode], page 2-7.

ⓒ List button : displays the channel or category list. [Selecting XM broadcast channel], page 2-7.

ⓓ Search button : selects the channel by directly inputting the channel number.
[Selecting XM broadcast channel], page 2-7.

ⓔ Scan button : scans all frequencies or just the preset channels for 5 seconds each.
[Scanning XM broadcast channel], page 2-9.

ⓕ Sound button : adjusts the FAD/BAL, BASS/MID/TREB controls.
[Sound setting], page 1-10.

Switching the XM mode (Channel / Category)

Each time the Mode button is pressed, the mode will switch between channel mode and category mode.
Use the tune knob to change categories and press the tune knob change to selected category.

Selecting XM broadcast channel

There are 5 ways to select a broadcast channel - (a) selecting through preset, (b) selecting with channel Up/Down, (c) Selecting a channel through manual search, (d) selecting through channel/ category list, (e) selecting by directly inputting the channel number.

(a) Selecting a channel through preset

Press the preset button of the desired channel.

INFORMATION

- Press the VSEEK or TRACK∧ keys on the steering wheel remote controller for less than 0.8 second. The preset channels of the current band will be selected in order.
- There are 6 preset channels each for XM1, XM2, and XM3.
[Storing XM preset], page 2-9.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
"Preset <1 to 6>"
"Preset Up"
"Preset Down"

(b) Selecting with Channel Up/Down

Press the VSEEK or TRACK∧ keys on the control panel for less than 0.8 second.
The previous or next channel will be selected.

INFORMATION

- If in Channel mode, the channel is selected from all channels. If in Category mode, the first channel of each category is selected.
- Press the VSEEK or TRACK∧ keys on the control panel or steering wheel remote controller for more than 0.8 second to quickly move to the nearest desired channel. Once the button is released, the current channel will be selected.

PART 2 AUDIO SYSTEM

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
"Channel Up"
"Channel Down"

(c) Selecting a channel through manual search

Turn the VTUNE∧ key in clockwise or counter-clockwise direction to display the previous or next channel information. After a brief moment, the selected channel will be displayed.

INFORMATION

If in channel mode, the channel is selected from all channels. If in category mode, the first channel of each category is selected.
(Category search)

(d) Selecting channel through channel/ category list

1. Press the List button.
- If in category mode, the all category list screen will be displayed.
Select the desired category button to display the channel list screen for the corresponding category.

- If in channel mode, the all channels list screen will be displayed.

2. Select the desired channel button. The previous screen will be restored and the selected channel will begin playing.

(e) Selecting channel by directly inputting the channel number

1. Press the Search button. The channel input screen will be displayed.

2. Input desired channel number, and press the OK button.

The previous screen will be restored and the selected channel will begin playing.

INFORMATION

To prevent inputting a channel which exceeds the channel range, numbers which cannot be inputted are set to disabled state.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Channel<0 to 255>"

Storing XM preset

1. Select the desired channel. [Selecting XM broadcast channel], page 2-7.

2. Press the preset button for over 0.8 second. The frequency will be saved along with beep sound.

INFORMATION

Six preset frequencies each for XM1/ XM2/ XM3 modes can be stored using the above instructions.

Scanning XM broadcast channel

1. Press the Scan button.

- SCAN (under 0.8 second): scans all channels for 5 seconds each if in channel mode. If in category mode, scans all channels within the current category for 5 seconds each.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Scan"

- PRESET SCAN (over 0.8 second): scans the 6 preset channels within the current band for 5 seconds each.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Preset Scan"

1. Press the Scan button again to continue playing the channel. The scan will be terminated and the current channel will continue to be played.

INFORMATION

- When scanning has completed an entire revolution, the scan function is automatically terminated and the previous played channel will be restored.
- Channel 0 is the radio ID and contains information required for XM Activation.

PART 2 AUDIO SYSTEM

Operating the CDP

About CDP

Precautions upon handling discs

- After using a disc, keep it in the original case to prevent it from becoming scratched, which may cause the CD to make popping sounds.
- Do not use heart-shaped discs, octagon-shaped discs, or any other abnormally shaped disc. Such discs may be the cause of malfunctions.
- Do not clean discs with chemical solutions such as record sprays, antistatic sprays, antistatic liquids, benzene, or thinners. Such materials may cause the surface of DISC to be unrecoverable.
- Do not expose the disc to direct sunlight for prolonged periods of time. Such exposure may lead to disc deformation.
- Dust, scratch, and other substances may cause popping sound while playing as well as sound deterioration.
- Never place paper on either side of the disc or write on disc surfaces. Sharp writing utensils and inks used in felt-tip pens may cause damage to disc surfaces
- Clean fingerprints and dust off the signal surface (coated side) of the disc with a soft cloth.
  Only soft cloths should be used as there are no grooves for dust to get in as is the case with LPs.
- Copy-protected CDs such as S-type CDs may not function in the device.
- DATA CDs are not supported by the device. (However, such discs may operate abnormally.)

For safe and efficient operation

- Do not disassemble the CDP for repair purposes. Contact your place of purchase in the case of malfunction. (Complete service assistance will not be provided if the user disassembles the device.)
- Do not use water to clean the device.
  Exposure to water may cause damage to the device.
- Be cautious not to introduce foreign substances into the disc insert slot.
  Foreign substances may cause damage to the interior of the device.
- The device may fail to operate properly in extremely hot or cold temperatures.
  Discontinue the use of the device unless normal temperature is maintained.
  (The operational temperature range is: -10℃ ~ 65℃).
- Steam can be condensed on the fiberoptic lens due to rain, wet conditions, or upon operating the heating system.
- Skipping may occur to the audio when driving on bumpy roads for prolonged periods of time or upon severe shock to the vehicle.
- Do not use chemical solvent to clean the device. Such solvents may cause damage to the surfaces of the device.
  Always use a clean and dry cloth.

⚠ WARNING !

Always pay full attention to driving. Avoid operating your system in such a way that you are distracted from driving your vehicle.

Supported disc formats

- The disc types supported by this device are as shown below.

Disc Size
3-inch (7.6 cm)
5-inch (12.7cm)

Formato del disco	Medios del disco	Formato del disco
CD	CD	CD-DA
	CD-R	MP3
	CD-RW	WMA
	Multisession-CD	DTS-CD
		CD-ROM
		CD-G
		CD-EXTRA
		CD-TEXT
SACD	SACD	
	SACD(Hybrid)	

Disc format	Audio format
CD	LPCM
MP3	MPEG1, Layer3
	MPEG2, Layer3
	MPEG2.5
WMA	Ver9

- CD-R or CD-RW DISC burned with a bulk CD without quality guarantees may not be recognized by the device.
- Inserting an abnormal disc may result in faulty operation or recognition.

PART 2 AUDIO SYSTEM

Disc/Content format compatibility

- Ordinary disc compatibility
  - This device has been designed/ manufactured to be compatible with software bearing the following logo marks.

Audio-CD CD-R CD-RW

  - CD-R/RW discs (Audio CD and MP3 CD) created with CD-writing devices or personal computers may not properly function in the device. This may be caused by damaged recording method, contamination by dirt and other foreign substance on the disc surfaces or play lens, and various other reasons.

- Special formats or special features regarding software
  - CD-R/RW Compatibility.
  - This device operates as a CD-ROM including CD-R and CD-RW DISC written in CD Audio or MP3 CD Format.
  However, other contents may cause abnormal disc operation such noise.
  - The writing of CD-R and CD-RW discs with this device is not supported.
  - Although CD-R/RW discs burned as audio CDs which have not been finalized are not supported by the device, some information such as play time may be displayed.
  - PC-created DISC compatibility.
  - When recording a disc with a personal computer, even discs recorded in a "format compatible" with the formats described above may not operate on the device caused by software settings of the recording application. In such cases, contact the software developer.
  - Additional information regarding compatibility can be found on the CD-R/ RW software disc box.
  DVD-R/RW are not supported by the device.

- Compressed audio compatibility

This device plays audio files compressed by MPEG-1 audio stream layer 3(MP3) using 32, 44.1 and 48kHz fixed bit rates. Incompatible files are not supported.

  - Variable bit rate files may operate, but the play time information may not be properly displayed.
  - Physical formats of CD : Model 1, Model 2 XA format 1.
  - This device only supports tracks with file extension of ".MP3" or ".WMA".
  - This device does not support multi-session discs.
  - This device supports a maximum of 256 folders and maximum 512 files.

Folders and files which exceed this limit will not be supported.

  - There are various bit rates which can be encoded onto a MP3 file.
  This device has been designed to be compatible with various bit rates.
  Audio which has been encoded at 128kbps will sound similar to CD audio sound quality.

Although this device supports low bit rate MP3 tracks, such tracks may only provide low quality sound.

- For stable operation, the use of files in 95kbps ~ 192kbps bit rate range and 44.1kHz SAMPLING frequency is recommended.

Inserting/Ejecting Disc

Inserting a Disc

Insert the disc into the slot.
The disc will begin playing automatically after it has been inserted.

INFORMATION

If the operation mode had been Audio mode before inserting the disc, the device will convert to the DISC mode screen and begin playing.
If the operation mode had been Navigation mode, then Navigation mode screen will remain and the disc play status will be displayed through the Audio bar.

Ejecting a Disc

Press the ⏏ key.
The disc will immediately be stopped and ejected.

INFORMATION

- If the operation mode had been in Audio mode before ejecting the disc, the device will be converted back to Audio mode.
  If the operation mode had been in Navigation mode, then Navigation mode screen will remain.
- If the disc is straddled on the slot without removing for approximately 10 seconds, the disc will be re-inserted automatically into the disc player.
  In such a case, the disc will not begin playing automatically.

PART 2 AUDIO SYSTEM

CD

Listening to CD music

1. Insert the CD or press the MEDIA key on the control panel if the CD is already inserted.
2. Select the desired track. [Selecting the CD track], page 2-15.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "DISC"
   "CD"
   "CD Track <1 to 665>"

CD screen and functions

1. Mode display : displays that the current mode is CD mode.
2. REPEAT/RANDOM/SCAN indicator : if REPEAT/RANDOM/SCAN is operating, the switch is displayed.
3. Track number : displays the track number.
4. Play Time : displays the play time.
5. Current time : displays the current time manually automatically according to the GPS time.

a Repeat buttons : repeat the current playing track.
[Setting Repeat function for CD music], page 2-15.

b Random button : plays the tracks on the disc in random order.
[Setting Random function for CD music], page 2-16.

c Scan button : scans all tracks on the disc for 10 seconds each.
[Scanning CD track], page 2-16.

d Sound button : adjusts the FAD/BAL, BAS, MID, TRE controls.
[Sound setting], page 1-10.

Selecting the CD track

There are 2 ways to select a CD Track - (a) selecting through Track Up/Down, (b) selecting through searching Track.

(a) Selecting through Track Up / Down

Press the VSEEK or TRACK∧ keys on the control panel or steering wheel remote controller for less than 0.8 second. The next or previous track will begin playing.

INFORMATION

If the VSEEK key on the control panel or steering wheel remote controller is pressed shortly while the track has played for more than 3 seconds, the start of the current track will begin playing. If the track has been playing for less than 2 seconds, the start of the previous track will begin playing.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Next Track"
   "Previous Track"

(b) Selecting track through search

1. Turn the VTUNE∧ key on the control panel in clockwise or counter-clockwise direction. Each click on the VTUNE∧ key will display the information of the next or previous track. The current playing track will continue to be played.
2. Press the VTUNE∧ key at the desired track. The searched track will begin playing.

REW/FF CD track

Press and hold the VSEEK or TRACK∧ keys on the control panel or steering wheel remote controller for over 0.8 second.
The track will play 20 times faster while holding the button and return to normal play when the button is released.

Setting Repeat function for CD music

Press the Repeat button. Each press will change the function in the following order:
REPEAT → REPEAT OFF → REPEAT

- REPEAT : repeats the current playing track.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Repeat Track"
   Say "Normal Play" in order to terminate the set Repeat.

Setting Random function for CD music

Press the Random button. Each press will change the function in the following order:
RANDOM → RANDOM OFF → RANDOM...

- RANDOM : plays all tracks in the disc in random order.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Random"
   Say "Normal Play" in order to terminate the set Random function.

PART 2 AUDIO SYSTEM

Scanning CD track

1. Press the Scan button. Each press will change the function in the following order:
   SCAN → SCAN OFF → SCAN...

- SCAN : scans all tracks in the disc for 10 seconds each.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Scan"
   Say "Normal Play" in order to terminate the set Scan function.

2. Press the Scan button again to continue listening to the track. The scan will be terminated and the current track will continue to be played.

INFORMATION

When scanning has completed an entire revolution, the scan function is automatically terminated and the previous played track will be restored.

MP3

MP3 disc related information and precaution

● Information

- The MP3 file standards supported by the device are as follows.
- Acceptable standard: MPEG1 AUDIO LAYER 3
- Acceptable sampling frequency: 32, 44.1, 48 (KHz)
- Acceptable bit rate: 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 (Kbps)
- Recommended bit rate & reference sampling frequency: 96,128, 192 Kbps fixed bit rate /44.1KHz
- ID3 tag
  This device supports ID3v1.0, ID3v1.1, ID3v2.2, ID3v2.3, and ID3v2.4 ID3 tags.
- Supported media
  The MP3 media supported by the device are CD-ROM and USB.
- Supported media formats
  This device supports ISO9660 LEVEL1 and LEVEL2. Detailed specification is as below.
- Maximum directory layers: 8 layers
- Maximum folder length: 64 Bytes, file name length: 64 Bytes
- Supported characters for folder name/ file name: Alphanumeric characters, Korean standard character set 2350 characters, Simplified Chinese 4888 characters
- Maximum number of folders which can be stored onto one disc: 256 folders (including ROOT directory)
- Maximum number of files which can be stored onto one disc: 512 files
- Precautions upon burning MP3 files
- The use of ISO 9660 LEVEL 2 JOLIET format is recommended when burning MP3 files. Burning in other formats may abnormally display the file names.
- It is possible to display up to 32 characters for file and folder names in case of UNICODE, and up to 64 characters in case of ASCII. Although the full length of the file name can be displayed by using the scroll function, the full length of folder names may not be displayed as the scroll function does not operate when displaying folder names.

● Precaution

Please use a MP3 bit rate which is less than 128 kbps. The sound quality cannot be guaranteed for MP3s exceeding 128kbps.

PART 2 AUDIO SYSTEM

Listening to MP3 music

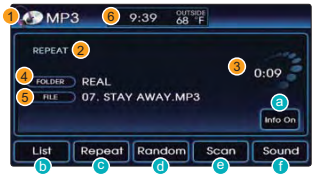
1. Insert the MP3 disc or press the MEDIA key on the control panel if the MP3 disc is already inserted.

2. Select the desired file. [Selecting the MP3 file], page 2-19.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "DISC"
   "CD"
   "MP3"

MP3 screen and functions



1. Mode display : displays that the current mode is MP3 disc mode. (MP3 files on DVD discs are not supported.)
2. REPEAT/RANDOM/SCAN indicator : if REPEAT/RANDOM/SCAN is operating, the switch is displayed.
3. Play Time : displays the play time.
4. Folder name : displays the folder name.
5. File name : displays the file name.
6. Current time : displays the current time manually automatically according to the GPS time.

a. Info On/Off button : displays or hides the detailed file information for the current playing file.
   [Viewing detail information for MP3 file], page 2-20.
b. List button : displays the MP3 folders and file lists for the disc.
   [Selecting the MP3 file], page 2-19.
c. Repeat button : repeats the current playing folder or file.
   [Setting repeat function for MP3 file], page 2-20.
d. Random button : plays all files on the disc or folder in random order.
   [Setting random function for MP3 file], page 2-20.
f. Scan button : scans all files on the disc or folder for 10 seconds each.

Selecting to MP3 music

There are 3 ways to select an MP3 file - (a) selecting through file up/down, (b) selecting through searching files, (c) selecting through MP3 list.

(a) Selecting through File Up / Down

Press the VSEEK or TRACK∧ keys on the control panel or steering wheel remote controller for less than 0.8second. The next or previous file will begin playing.

INFORMATION

If the VSEEK key on the control panel or steering wheel remote controller is pressed shortly while the song has played for more than 3 seconds, the start of the current song will begin playing. If the song has been playing for less than 2 seconds, the start of the previous song will begin playing.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Next File"
   "Previous File"
   "Next Folder"
   "Previous Folder"

(b) Selecting through search

1. Turn the VTUNE∧ key on the control panel in clockwise or counter-clockwise direction. Each click on the VTUNE∧ key will display the information of the next or previous file. The current playing file will continue to be played.

INFORMATION

If the operation of the Tune knob is too rapid, there may be a delay in displaying the file information.

2. Press the VTUNE∧ key at the desired file. The searched file will begin playing.

(c) Selecting through MP3 List

1. Press the List button. The file list of the folder for the current playing file will be displayed.

INFORMATION

If many songs and folders are recorded onto a DISC, file loading time may be longer and cause the play list to be improperly displayed or song search through TUNE operation to operate improperly. In such cases, wait until file loading is complete and try again.

2. Press the desired menu to return to the main screen and play the selected file.

PART 2 AUDIO SYSTEM

REW/FF MP3 file

Press and hold the VSEEK or TRACK∧ keys on the control panel or steering wheel remote controller for over 0.8 second.
The file will play 20 times faster while holding the button and return to normal play when the button is released.

Viewing detail information for MP3 file

1. Press the Info On button. The detailed information (Title, Artist, Album, Genre) for the current playing MP3 will be displayed.

2. Press the Info Off button. The detailed information will be turned off.

Setting Repeat function for MP3 file

Press the Repeat button.
Each press will change the function in the following order: Repeat → Folder Repeat → Repeat Off → Repeat ...

- Repeat : repeats the current playing file.
- Folder Repeat : repeats the files in the current folder.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Repeat File"
   "Repeat Folder"
   Say "Normal Play" in order to terminate the set Repeat function.

Setting Random function for MP3 file

Press the Random button.
Each press changes the setting as follows : Random → Folder Random → Random Off → Random ...

- Folder Random : plays the files in the current folder in random order.
- Random : plays all files in the disc in random order.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Random"
   "Random Folder"
   Say "Normal Play" in order to terminate the set Random function.

Scanning MP3 file

1. Press the Scan button.
   Each press will change the function in the following order : Scan → Folder Scan → Scan Off → Scan ...
   - Folder Scan : plays all files in the current folder for 10 seconds each.
   - Scan: scans all files in the disc for 10 seconds each.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Scan"
   "Folder Scan"
   Say "Normal Play" in order to terminate the set Scan function.

2. Press the Scan button again to continue listening to the file. The scan will be terminated and the current file will continue to be played.

INFORMATION

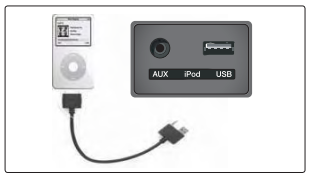
When scanning has completed an entire revolution, the scan function is automatically terminated and the previously played file will be restored.

Operating external devices

iPod®

iPod® is a registered trademark of Apple Inc.

Connecting iPod device



Connect the iPod device as shown in the picture.
The identification of the iPod device, battery recharge, and other functions provided by the iPod device can be normally supported only by using a separately sold iPod connector cable.
If the USB cable provided upon purchasing the iPod for charging is used as the connector cable, the device will be recognized as a USB and may not properly operate or display all of the display information.

- Supported iPod devices : Classic 4th/5th/6th, Mini 1st/2nd, NANO 1st/2nd/3rd/4th and Touch 1st/2nd Generations.
  If iPod mode cannot be entered due to identification error, no track, incompatible protocol version, or other reasons, a pop-up message will be displayed for 5 seconds and return automatically to the previous mode. If the message continues even after reconnecting the iPod, check to see if there are any problems with the iPod device.

CAUTION!

If a playing iPod is connected to the audio system, a high-pitched tone may occur for approximately 1-2 seconds.
Please turn the iPod device to pause/stop prior to connecting it to the vehicle.

INFORMATION

An iPod cable assembly can be purchased at your local Hyundai dealer.

Listening to iPod music

1. Connect the iPod or press the MEDIA key on the control panel if the iPod is already connected.

INFORMATION

Even if the iPod is connected, message may be displayed if an error has occurred. In such a case, reconnect the iPod.

2. Select the desired song.
[Selecting an iPod song], page 2-23.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "iPod"

iPod screen and functions

1. Mode display : displays that the current mode is iPod mode.
2. REPEAT/RANDOM indicator : if REPEAT/RANDOM is operating, the switch is displayed.
3. Title name : displays the title name of the playing file.
4. Play Time : displays the play time.
5. Artist name : displays the artist name of the playing file.
6. Album name : displays the album name of the playing file.
7. Current time : displays the current time manually automatically according to the GPS time.

a. Menu button : converts to the search menu screen.
[Selecting an iPod song], page 2-23.

b. Repeat buttons : repeats the current playing song.
[Setting repeat function for iPod song], page 2-25.

c. Random button : plays all songs in the current playing list in random order or randomly in album unit.
[Setting random function for iPod song], page 2-25.

d. Sound button : adjusts the FAD/BAL, BASS/MID/TREB controls.
[Sound setting], page 1-10.

Selecting an iPod song

There are 3 ways to select songs from the iPod device - (a) selecting song through Up/Down, (b) selecting song through sequential search, (c) selecting song through menu.

(a) Selecting song through Up / Down

Press the VSEEK or TRACK∧ keys on the for less than 0.8 second. The next or previous song will begin playing.

INFORMATION

If the VSEEK key on the control panel or steering wheel remote controller is pressed shortly while the track has played for more than 3 seconds, the start of the current song will begin playing. If the track has been playing for less than 2 seconds, the start of the previous song will begin playing.

PART 2 AUDIO SYSTEM

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Next Song"
   "Previous Song"

(b) Selecting song through search

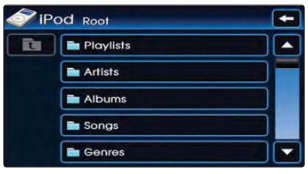
1. Turn the VTUNE∧ key on the control panel in clockwise or counter-clockwise direction.
   Operate the VTUNE∧ key dial to display the previous or next channel information. After a brief moment, the selected channel will be displayed.

INFORMATION

If the operation of the VTUNE∧ key is too rapid, there may be a delay in displaying the song information.

(c) Selecting song through Menu

1. Press the Menu button. The iPod menu screen will be displayed.



2. Press the button for the desired search method.

INFORMATION

If the search mode is accessed while playing a song, the most recent searched step will be displayed. The search steps upon initial connection are listed below.

3. Press the desired song button to return to the main screen and play the selected song.

REW/FF iPod song

Press and hold the VSEEK or TRACK∧ keys on the control panel or steering wheel remote controller for over 0.8 second. The song will be play faster while holding the button and return to normal play when the button is released.

	1 Step	2 Step	3 Step	4 Step
Playlist	Playlist	Song		
Genre	Genre	Artist	Album	Song
Artist	Artist	Album	Song	
Composer	composer	Album	Song	
Album	Album	Song		
Audiobooks	Song			
Songs	Song			
Podcasts	Program	Episode		

Setting Repeat function for iPod song

Press the Repeat button. Each press will change the function in the following order : Repeat → Repeat Off → Repeat ...

- Repeat : repeats the current playing song.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Repeat Song"
   Say "Normal Play" in order to terminate the set Repeat function.

Setting Random function for iPod song

Press the Random button. Each press will change the function in the following order : Random → Album Random → Random Off → Random ...

- Album Random : plays the songs in the current play list randomly in album units. However, songs within the same album are played in sequential order.

e.g.) Album1(Music1→Music2→Music3→...→Music10)→Album5(Music→Music2)→Album4(Music1→Music2→Music3) ...

- Random : plays all files in the current play list (All Songs, certain albums, or user designated iPod Playlists) randomly regardless of album.

e.g.) Music1→Music9→Music5→Music13 ...

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Random"
   "Random Album"
   Say "Normal Play" in order to terminate the set Random.

PART 2 AUDIO SYSTEM

USB MP3

USB MP3 related information and precaution

- Information
  - The MP3 file standards supported by the device are as follows.
  - Acceptable standard: MPEG1 AUDIO LAYER 3
  - Acceptable sampling frequency: 32, 44.1, 48 (kHz)
  - Acceptable bit rate : 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 (kbps)
  - Recommended bit rate & reference sampling frequency: 96,128, 192 kbps fixed bit rate /44.1kHz
  - ID3 tag
    This device supports ID3v1.0, ID3v1.1, ID3v2.2, ID3v2.3, and ID3v2.4 ID3 tags.
  - Supported media
    The MP3 media supported by the device are CD-ROM and USB.
  - Supported media formats
    This device supports ISO9660 LEVEL1 and LEVEL2. Detailed specification is as below.
  - Maximum directory layers: 20 layers
  - Maximum length of folder name/file name: 250Bytes
  - Supported characters for folder name/ file name: Alphanumeric characters, Korean standard character set 2350 characters, Simplified Chinese 4888 characters
  - Maximum number of folders which can be stored onto one USB: 2000 folders (including ROOT directory)
  - Maximum number of files which can be stored onto one USB: 6000 files
  - Precautions upon formatting USB & downloading MP3 files
  - The device only supports FAT type USB file system. The device will not play USB media content if the USB is NTFS type.
- Precaution

Please use an MP3 bit rate which is less than 192Kbps and a fixed bit rate.
The sound quality cannot be guaranteed for MP3s exceeding 192Kbps and operation of specific functions (limited to FF/REW functions) may be abnormal with variable bit rates.

Precautions upon handling USB

- When using the external USB device, make sure to keep the device disconnected and connect only some time after turning on the vehicle ignition. The USB device may be damaged if the USB device already connected when the ignition is turned on. (USB device is not an electronic automotive component)
- The external USB device may not operate if the USB device already connected when vehicle ignition is turned on or off.
- The device will not operate when playing a format which is not MP3 or WMA file formats.

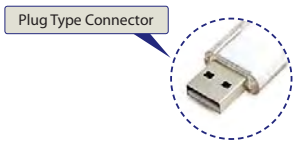
1. Only MP3 files with compression rates between 8Kbps~320Kbps are supported.
2. Only WMA files with compression rates between 8Kbps~320Kbps are supported.

- Be cautious of static electricity when connecting/disconnecting the external USB device.
- Encoded MP3 Players will not be recognized when connected as the external device.
- When connecting an external USB device, the device may not be properly recognize the USB when the USB is in some states.
- When formatting the external USB device, the device may not be properly recognize a Byte/Sector selection other than 512Byte or 2048Byte.
- The device will only recognize USB devices formatted in FAT 12/16/32.
- Some USB devices may not operate properly because of compatibility issues. Verify that the external device is supported by the device before starting use.
- Avoid contact between the USB connector with bodily parts and foreign substances.
- Repeatedly connecting/disconnecting the USB in a short period of time may cause damage to the device.
- When disconnecting the USB, an abnormal sound may occur occasionally.
- Abruptly disconnecting the external USB device while the USB is operating may cause the device to be damaged or function abnormally.
  Make sure to disconnect the USB device only after the audio power is turned off or when the audio is operating in a different mode.
- The amount of time required to recognize the external USB device may differ depending on the type, size, or file formats stored on the USB. Such differences in the required time are not indications of malfunction.
  Please wait the period of time required to recognize the device.
- The device supports only USB devices used to play music files.
- Do not use the USB I/F to charge batteries or USB accessories which generate heat. Such acts may lead to deteriorated 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 to the multimedia terminal of the vehicle.
- In the case of high capacity USB devices, there are instances where the logical drives are partitioned for user convenience. In this case, only the USB music in the top-level logical drive will be possible to play.
  When using partitioned drives, save the songs desired to play on the device only in the top-level logical drive.
  In addition, certain USB devices are configured with a separate drive used to install application programs and songs from such drives may not be possible to play for the reasons as described above.

PART 2 AUDIO SYSTEM

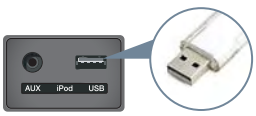
- The device may not support normal operation if MP3 Players, cellular phones, digital cameras, or other electronic devices (USB devices not recognized as portable disk drives) are connected to the device.
- The device may not support normal operation when using a USB memory type besides the Metal Cover 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).
- The device many not support normal operation if the proper connection with the USB memory fails due to vibrations caused by the vehicle. (i-stick type, etc.)
- 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 as shown below.



Connecting the USB

Connect the USB as shown in the picture.



Listening to USB music

1. Connect a USB or press the MEDIA key on the control panel if the USB is already connected.
2. Select the desired file. [Selecting the MP3 file], page 2-19.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "USB"

INFORMATION

The USB screen and operation method is the same with MP3 mode. Please refer to the MP3 mode section for more information.

USB IMAGE Mode

Starting USB IMAGE Mode

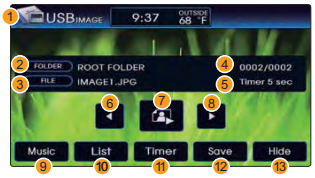
1. The USB mode will automatically start when the USB is inserted. When in a different mode, repeatedly press the MEDIA key to convert to USB mode. (Each press will change in order of AUX→DISC→USB)

2. The image will become displayed on the screen.

INFORMATION

Press the Music or Vedio button on the bottom left side to enter either mode. (Supported only when compatible files exist within the USB)

USB IMAGE mode menu screen configuration



1. Mode display : display that the current mode is <USB Image> mode.
2. Folder name : displays the name of the folder where photo files are located.
3. File name : displays the file name of the current photo.
4. File index : displays the number of Image files within the USB (current file / all files)
5. Slide Show Interval : displays intervals of 5, 10, and 20 seconds.
6. ◀ button : displays the previous photo.
7. Slide Show View : displays photos in intervals of 5, 10, and 20 seconds.
8. ▶ button : displays the next photo.
9. USB music (MP3) Mode Music button : converts to <USB Music> mode.
10. List button : displays the <Image List> screen.
11. Timer button : allows changes to slide show interval.
12. Save button : upon turning off power, saves the current image as the frame screen image.
13. Hide button : hides the button display.

PART 2 AUDIO SYSTEM

Operating USB IMAGE Mode

(a) Moving to next IMAGE

1. Press the screen.

2. Within the Image screen, press the ◀ or ▶ button to flip through each file.

(b) Displaying USB IMAGE Slideshow Interval

1. Repeatedly press the Timer button at the bottom to change the slideshow interval (converts in time intervals of 5 seconds → 10 seconds → 20 seconds → 5 seconds).

(c) Registering Frame

1. Press the Save button at the bottom of the <Image> screen. The currently displayed image will be registered as the frame.

INFORMATION

For details on setting up the frame, refer to the frame setup page within Screen setup.
Restrictions while driving – Image Play related buttons cannot be used while the vehicle is in motion.
There are five buttons such as <▶ / ◀ / Play Icon / Save / Hide .

AUX

Connecting AUX

Connect the external Audio player as shown in the picture.

INFORMATION

Connect only by using AUX terminals.

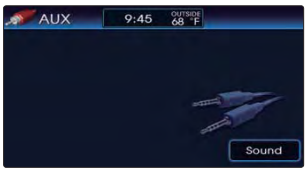
Playing AUX

Connect an AUX or press the MEDIA key on the control panel if the AUX is already connected.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Line In"

AUX screen



Audio AUX screen

PART 3 NAVIGATION SYSTEM

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NAVIGATION SYSTEM

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Limitations of the navigation system

GPS signal reception state

● As the GPS satellite frequency is received / transmitted in straight lines, reception may not work if hiding devices are placed on or near the GPS antenna or when traveling through the following locations.

• Tunnels

• Basement parking structures

• Underneath an overpass

• Roads within forested areas

• Areas near high rise buildings

• Roads within canyons

Vehicle position display

- If multipass errors occur due to reflections from buildings or related causes, the current position mark on the navigation may differ from the actual position of the vehicle.

- The position of the vehicle on the navigation may be different from the actual position if the vehicle is under the following conditions. If such differences occur, driving for a short period of time will automatically correct the position of the vehicle through map matching or GPS information (several minutes may be necessary in certain cases).

- When driving on a Y-shaped road with a narrow angle, the current position may be displayed in the opposite direction.
- If the vehicle is loaded onto a ferry or a car transport vehicle, the current position mark may be stalled on the last position prior to loading.
- When driving on a spiral-shaped road.
- When driving in mountain regions with sharp turns or sudden brakes.
- When entering a road after having been in an underground parking structure, building parking structure, or turntable with many rotations.
- When the tires have recently been replaced (Especially upon use of spare or studless tires)
- If the battery terminal is removed.
- When driving in city streets, the current position may be displayed on the opposite side or on an off-road position.
- When changing the zoom level from the maximum zoom in level to a different zoom level, the current position mark may be displayed on a different road.
- When driving in heavy traffic with frequent go·stops in traffic or intersections.
- When driving under slippery conditions, such as heavy sand, snow, etc.
- When driving with the tire chain in place.
- When using a tire with an incorrect size specification.
- When the tire pressure for the 4 tires are different.
- When the replacement tire is a worn or used tire (Especially studless tires having passed a 2nd seasons, etc.)
- When driving near high-rise buildings
- If a roof carrier has been installed
- When driving under high speeds or having calculated a long-distance route.

PART 3 NAVIGATION SYSTEM

Route Guidance

- Suitable route guidance may not occur caused by search conditions or the driving position.
- Guidance to go straight may be given while driving on a straight road.
- Guidance may not be given even when having turned at an intersection.
- There are certain intersections in which guidance may not occur.
- A route guidance signaling for a U-Turn in a No U-Turn location may occur.
- A route guidance signaling entrance into a no enter zone may occur (No enter zone, road under construction, etc.).
- Guidance may be given to a position removed from the actual destination if roads to reach the actual destination do not exist or are too narrow.
- Faulty voice guidance may be given if the vehicle breaks from the designated route (ex: if a turn is made at an intersection while the navigation provided guidance to go straight).
- Map Data may be missing or incorrect causing route guidance to not be given.

Route Re-calculation

- The following phenomena may occur after conducting route recalculation.
- Guidance may be given to a position differing from the current position when turning at an intersection.
- Route Recalculation may take a longer period of time when driving under high speeds.
- A route guidance signaling for a U-Turn in a No U-Turn location may occur.
- A route guidance signaling entrance into a no enter zone may occur (No enter zone, road under construction, etc).
- Guidance may be given to a position removed from the actual destination if roads to reach the actual destination do not exist or are too narrow.
- Faulty voice guidance may be given if the vehicle breaks from the designated route (ex: if a turn is made at an intersection while the navigation provided guidance to go straight)

Starting navigation system

Press the Navigation mode key (MAP VOICE, DEST, ROUTE, SETUP). The Caution screen will always be displayed when first entering into Navigation mode. Read the contents of the caution screen carefully and press the Agree button.

Map Functions

Current position map screen (without route)

Press the MAP VOICE key on the control panel to display the map of current position and the neighboring area.

1. GPS signal state indicator : displays the state of GPS signal reception.
   [Viewing GPS signal state], page 3-7.
2. Map scale level indicator : displays the current map scale.
   [Changing the map scale], page 3-8.
3. Landmark icons : landmark icons are displayed on the map when the map scale level is set to under 300 ft (100m depending on map data)
   [Appendix : landmark icons], page 7-7.
4. POI icons : POI icons are displayed on the map when the map scale level is set to under 0.5 mi (800m).
   [Appendix : POI icons], page 7-5.
5. Current vehicle position icon : displays the current position of the vehicle.

PART 3 NAVIGATION SYSTEM

a. North Up / Heading Up switch : displays the current map mode and the map mode can be switched between North Up and Heading Up.
   [Switching map mode], page 3-6.
b. POI : displays or hides the POI icon on the map.
   [Displaying/Hiding POI icons on the map], page 3-9.
c. Map scale : increases or decreases the map scale.
   [Changing the map scale], page 3-8.

Switching map mode (North Up / Heading Up)

Each time the compass button is pressed, the screen will switch in the order shown below.
Heading Up → North Up → Heading Up ...

INFORMATION

All map screens (map screen after setting destination & whole route display screen) except the current position screen will always be displayed in North Up mode.

- North Up : displays the map always facing the North direction regardless of the direction which the vehicle is traveling.

The vehicle icon is displayed in the center position of the map.

- Heading Up : displays the map always facing the direction which the vehicle is traveling. The vehicle icon is displayed in the lower center position of the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "North Up"
   "Heading Up"

Viewing GPS signal state

The state of GPS signal reception is displayed as shown below.

- (active) :
  GPS reception is satisfactory.
- (inactive) :
  GPS reception is unsatisfactory.
  [System information and update], page 3-51.

INFORMATION

- GPS (Global Position System) : GPS is a system developed and operated by the United States which determines the current location of the user (longitude, latitu de, etc.) by generally using 4 or more satellites. This system is used with related GPS information, various sensors, road map data, and other navigation related information.
- GPS information may not operate under thefollowing conditions.
  - When buildings, tunnels, or other obstructions block satellite signals.
  - When materials are placed above the GPS antenna and block satellite signals.
  - When the satellite does not transmit signals (signal transmission is controlled by the satellite control center in the United States and may not transmit when under repair, modification, etc).
  - When a digital cellular phone (1.5GHz) is placed near the GPS antenna.
- This system uses GPS information, various sensors, road map data, and other related information to display the current position. Errors may occur if the satellite is transmitting inaccurate signals or if which can only two or less satellite signals can be received. Errors which occur in such conditions cannot be corrected.

PART 3 NAVIGATION SYSTEM

Changing the map scale

Press the or button. The map scale will be increased or decreased by one level.

INFORMATION

Each time the or button is pressed, the scale bar will be displayed.
The scale can be changed by directly pressing the scale level on the scale bar.
The green color on the scale bar indicates the current scale level while the orange color indicates the selected scale level.

- Press the or button for over 0.8 second. The scale will continuously change.
- If the scale range limit is reached, the or button will be disabled.
- The map scale range is between 1 and 14: 10,240,000 ~ 1 : 5,000.

Actual distance		
Level	mi / ft	km / m
1	150 ft	50 m
2	300 ft	100 m
3	700 ft	200 m
4	0.25 mi	400 m
5	0.5 mi	800 m
6	1 mi	1.6 km
7	2 mi	3.2 km
8	4 mi	6.4 km
9	8 mi	12 km
10	16 mi	25 km
11	32 mi	50 km
12	64 mi	100 km
13	130 mi	200 km
14	250 mi	400 km

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Zoom In"
   "Zoom Out"
   "Zoom Maximum"
   "Zoom Minimum"
   "Zoom level <1 to 14>"
   "Zoom <actual distance>"
   " (ex. Zoom 700ft)"

Displaying / Hiding POI icons on the map

Displaying/Hiding Q.POI icons

1. Press the POI ▼ button.
   Related menu buttons will be displayed at the bottom of the screen.

INFORMATION

The Q.POI icons are set to - Gas Station, - Parking, - Hotel, - Golf Course, - Bank, - Fast Food (6 icons) by default. This setting can be changed in SETUP.
[Setting Q.POI icons], page 3-42.

2. Press the icon buttons to display or hide.
   To turn off all POI icons displayed on the map, press the ALL OFF button.

INFORMATION

- The current displayed POI icons are highlighted while the icons not being displayed are shown as normal buttons.
- If there are no POI icons being displayed, the ALL OFF button will be disabled.
- POI icons are displayed when the scale is under 0.5 mi (800m).

Displaying / Hiding icons other than Q.POI icons

1. Press the POI ▼ button.
   Related menu buttons will be displayed at the bottom of the screen.
2. Press the Others button.

INFORMATION

Q.POI stands for Quick POI and refers to the function which turns POI icon display on or off on the map.

PART 3 NAVIGATION SYSTEM

(a) by category list

3. Press the desired main category button.

4. Select the desired sub category menu to display or hide (Multiple selections are possible).
   Press the selected menu again to cancel the selection.
5. If the Show Icon(s) button is pressed, the selected menus will be displayed or hidden on the map screen.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Show <POI name>" (ex. Show ATM)
   "Hide <POI name>" (ex. Hide ATM)
   "Hide All"

Making a call to POI

After searching a POI, the POI phone number information can be used to make a call to the POI facility.

1. Use the various search methods, such as the map scroll function, Q.POI search function, and destination search function to search for a POI.

2. Press the button.

3. Bluetooth is used to make a call to the POI facility.

4. Once the call is ended, the map is restored to the current vehicle location.

INFORMATION

- Making a call is not possible if there is no telephone information for a POI or if there is no mobile phone connected through Bluetooth.
- For more information of mobile phone authentication through Bluetooth or detailed information on conducting search, refer to [Pairing and connecting a Bluetooth phone], page 5-4.

Scrolling map

Press the map area on the map screen.
The selected point will be centered on the screen and the scroll mark will be displayed. Information about the marked point and straight line distance from the current position will be displayed at the top of the screen.

INFORMATION

If a map area on the map screen is pressed, the map will continuously scroll in the corresponding direction until the pressing is released.

PART 3 NAVIGATION SYSTEM

Setting a destination

Destination menu screen and functions

Press the DEST key on the control panel to display the destination menu screen.

a Address : sets the destination through address search.
[Searching an Address], page 3-13.

b Previous Dest : sets the destination through the previous destination list.
[Searching a Previous Destination], page 3-17 .

c Intersection : sets the destination through intersection search.
[Searching an Intersection], page 3-17.

d POI Search : sets the destination through POI Category search.
[Searching a POI], page 3-20 .

e Address Book : sets the destination through address book search.
[Searching from Address book], page 3-24 .

f Emergency : sets the destination through emergency facilities search.
[Searching for Emergency facilities], page 3-25 .

g HOME : sets the stored HOME as the destination.
[Searching your Home], page 3-25 .

h Favorite place 1 ~ 5 : sets the destination with one of the stored favorite places.
[Searching favorite places], page 3-26 .

Searching a Destination

Searching an Address

There are 2 ways to set the destination through address search-(a) by street, (b) by city.

1. Press the DEST key.

2. Press the Address button.

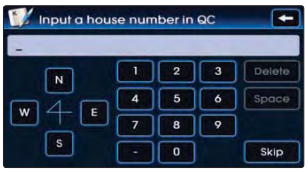
3. Press the State button to change the state.

4. Input the State name and press the List button.
   If the number of matches with the input is less than 4 results, then the state list screen will be displayed automatically.
   If the number of matches is only one result, then the state will automatically be changed without having to manually select the state.

5. Select the desired state from the list to change the state.

(a) by street

6. Press the Street button.



PART 3 NAVIGATION SYSTEM

7. Input the House number and Press the Done button to complete.
   If the House number is not recognized, press the Skip button.
   In this case, the range of house numbers will be displayed during the last step.

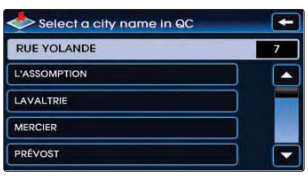
8. Input the Street name and press the List button.
   If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

9. If the desired street from the list is selected, the corresponding position will be displayed on the map.

INFORMATION

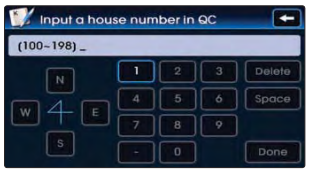
If more than 30 cities exist with the selected street, then the city input screen will be displayed. If less than 30 cities exist, then the city selection screen will be displayed.

10. Input the city name and press the List button to complete. If the number of matches with the input is less than 4 results, then the list screen will be displayed automatically.



11.Select the desired city from the list.

12. This screen will be displayed if the House number had not been inputted during step 6 and more than 2 house numbers ranges exist.
Select the desired House number range.



13. This screen will be displayed if the House number had not been inputted during step 6 and only one house numbers range exists.

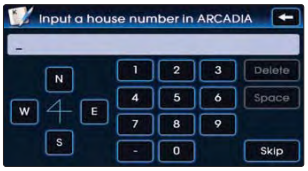
Input the House number and press the Done button to complete.
The corresponding position will be displayed on the map.

(b) by city

5. Press the City button.

6. Input the city name and press and press the List button.
If the number of matches with the input is less than 4 results, then the city list screen will be displayed automatically.

7. Select the desired city from the list.



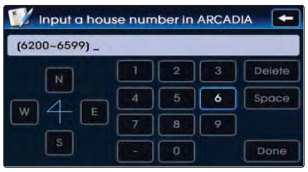
PART 3 NAVIGATION SYSTEM

8. Input the house number and press the Done button to complete.
If the House number is not recognized, press the Skip button.
In this case, the range of house numbers will be displayed during the last step.

9. Input the Street name and press the List button to complete.
If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

10. Select the desired street from the list and the corresponding position will be displayed on the map.

11. This screen will be displayed if the House number had not been inputted during step 8 and more than 2 House number ranges exist.
Select the desired House number range.



11. This screen will be displayed if the House number had not been inputted during step H and only one House number range exists.
Select the house number range and Press the Done button to complete.
The corresponding position will be displayed on the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
"Find address"
[Find address], page 5-19.

Searching a Previous Destination

1. Press the DEST key.

2. Press the Previous Dest button.

3. Select the desired previous destination. The corresponding position will be displayed on the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Previous destination"
   [Previous destination], page 5-24.
   "Previous start point"
   [Previous start point], page 5-25.

Searching an Intersection

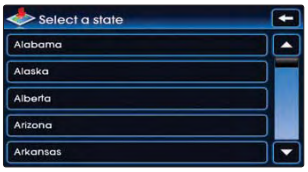
There are two ways to set the destination through intersection search-(a) by street, (b) by city.

1. Press the DEST key.

2. Press the Intersection button.

3. Press the State button to change the state.

4. Input the state name and press the List button. If the number of matches with the input is less than 4 results, then the state list screen will be displayed automatically.
   If the number of matches is only one result, then the state will automatically be changed without having to manually select the state.



5. Select the desired state from the list to change the state.

PART 3 NAVIGATION SYSTEM

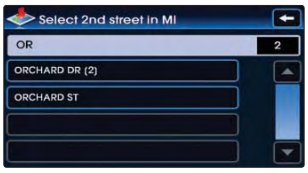
(a) by street

6. Press the Street button.

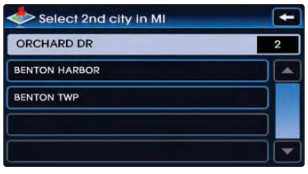
7. Input the name of the 1st street and press the List button.
   If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

8. Select the desired 1st street from the list.

9. Input the name of the 2nd street and press the List button.
   If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.



10. Select the desired 2nd street menu from the list. The corresponding position will be displayed on the map.

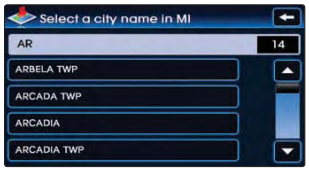


11. If the selected 2nd street is within more than 2 cities, then the city list screen will be displayed.
    Select the desired city menu from the list. The corresponding position will be displayed on the map.

(b) by city

6. Press the City button.

7. Input the city name and press the List button.
   If the number of matches with the input is less than 4 results, then the city list screen will be displayed automatically.



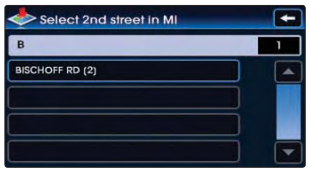
8. Select the desired city name.

9. Input the name of the 1st street and press the List button.
   If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

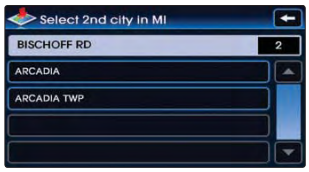
10. Select the desired 1st street menu from the list.

11. Input the name of the 2nd street and press the List button.
    If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

PART 3 NAVIGATION SYSTEM



12. Select the desired 2nd street menu from the list.
    The corresponding position will be displayed on the map.



13. If the selected 2nd street is within more than 2 cities, then the city list screen will be displayed. Select the desired city menu from the list. The corresponding position will be displayed on the map.

Searching a POI

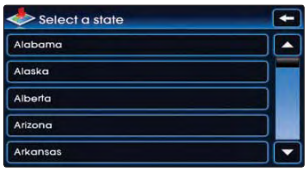
There are 3 ways to set the destination through POI search - (a) by category, (b) by name, (c) by phone number.

1. Press the DEST key.

2. Press the POI Search button.

3. Press the State button.

4. Input the state name and press the List button. If the number of matches with the input is less than 4 results, then the state list screen will be displayed automatically.
   If there is only one matching result, then the state will automatically be changed without having to manually select the state.



5. Select the desired state from the list to change the state.

(a) By category
Searches for facilities nearby the current position or from the city center.

6. Press the Category button.

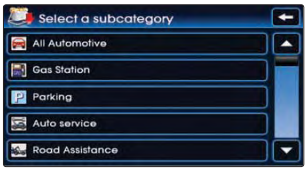
7. Press the Near current position button to search for facilities nearby the current position, or press the Near city center button to search for facilities in the near city center.

(a-1) Near current position
Searches for facilities within a 30 mi (45km) radius of the current position.

8. Press the desired main category menu.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Find nearest POI"
   [Find nearest POI], page 5-20.



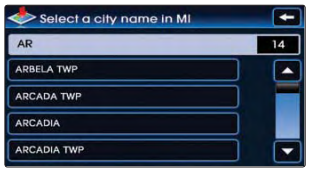
9. Press the desired sub category menu.

10. Select the desired menu button.
    The corresponding position will be displayed on the map.

PART 3 NAVIGATION SYSTEM

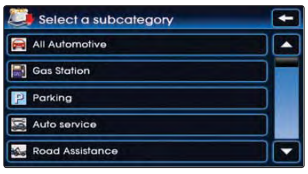
(a-2) Near city center
Searches for facilities from the city center.

8. Input the city name and press the List button.
   If the number of matches with the input is less than 4 results, then the city list screen will be displayed automatically.



9. Press the desired city menu.

10. Press the desired main category.



11. Press the desired sub category.

12. Select the desired menu button.
    The corresponding position will be displayed on the map.

INFORMATION

The distance on each POI item button refers to the distance from the city center.

(b) By name

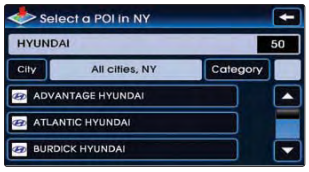
6. Press the Name button.

7. Input the name of the POI and press the List button.
   If the number of matches with the input is less than 4 results, then the facilities list screen will be displayed automatically.

8. Select the desired POI menu.
   The corresponding position will be displayed on the map.

INFORMATION

When necessary, the search conditions for the city and category can be changed by pressing the Advanced button.



● Changing City

1. Press the City button.
2. Input the city name and press the List button.
3. Select the desired city name.

● Changing Category

1. Press the Category button.
2. Select the desired main category menu.
3. Select the desired sub category menu.

(c) By phone number

6. Press the Phone # button.

PART 3 NAVIGATION SYSTEM

7. Input the phone number and Press the Done button to complete.
   The corresponding position will be displayed on the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Destination POI by Phone Number"
   [Destination POI by phone number], page 5-22.

Searching from Address book

1. Press the DEST key.
2. Press the Address book button.

3. Select the desired address book (user) menu.

INFORMATION

This system provides 5 address books. Each addresses book can hold up to 200 entries.

4. Select the desired address name from the list.
   The corresponding position will be displayed on the map.
   [Registering new address in address book], page 3-43.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Destination by address book"
   [Destination by address book], page 5-24.

Searching for Emergency facilities

1. Press the DEST key.

2. Press the Emergency button.

3. Select the desired facility category.

4. Select the desired facility.
   The corresponding position will be displayed on the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Find emergency <Category>"
   [Find emergency <Category>], page 5-23.

Searching your Home

1. Press the DEST key.

2. Press the HOME button.
   The Home position will be displayed on the map.

INFORMATION

If the Home address is not registered, then the HOME button will be displayed.
[Registering home address], page 3-48.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Go home"
   [Go home], page 5-25.

PART 3 NAVIGATION SYSTEM

Searching favorite places

1. Press the DEST key.

2. Select the desired button from 1 ~ 5.
   The corresponding position will be displayed on the map.

INFORMATION

If the address of the Favorite place is not registered, then the 1 ~ 5 buttons without registered addresses will be disabled.
[Registering favorite place], page 3-49.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Destination by memory point <1 to 5>"
   [Destination by memory point <1 to 5>], page 5-25.

Searching from MAP

Position the scroll mark at the destination by scrolling the map on the map screen.

Searching POI by local POI list

1. Press the POI▼ button on the map screen.

2. Press the Others button.

3. Press the Local POI lists button.

4. Select the desired POI menu.
   The corresponding position will be displayed on the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Find nearest <POI name>"
   [Find nearest <POI name>], page 5-21.

Operating after searching a destination

Changing destination position :

Changes the position of the destination by scrolling the map.

[Scrolling map], page 3-11.

Setting as Destination / waypoint :

Sets the position as the destination or waypoint.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Start guidance"
   (Sets the position of the scroll mark as the destination and begins route guidance.)

Adding to address book :

Saves the position in the address book.

[Registering new address in address book], page 3-43.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Store Marked Location to <text tag>"

PART 3 NAVIGATION SYSTEM

Operating after setting a destination

Starting Route Guidance

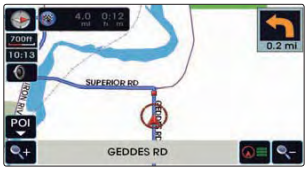
Press the Start Guidance button. Route Guidance will start.

- Route simulation
  - If the Start Guidance button is pressed and held for over 0.8 second, then the route simulation will start.
  - If the MAP key on the control panel is pressed during route simulation, then route simulation will be terminated.

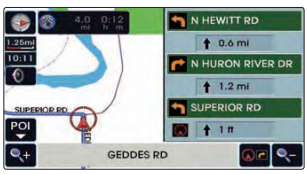
Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Time to destination"
   "Distance to destination"

Route guidance screen

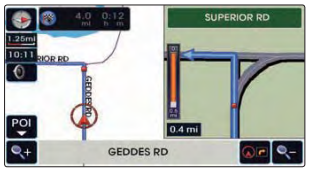


- Symbol guidance mode : if the button is pressed, then the following route guidance screen will be displayed.



- Turn-List mode : if the button is pressed, then the following route guidance screen will be displayed.

● Highway mode : if the button is pressed, then the following route guidance screen will be displayed.



● Intersection zoom mode : this route guidance screen is automatically displayed during guidance at an intersection.
Once guidance at the intersection is complete, the screen will automatically disappear and the previous guidance screen will be restored.

● Highway junction mode : this route guidance screen is automatically displayed during guidance at highway junctions.
Once guidance at a highway junction is complete, this screen will automatically disappear and the previous guidance screen will be restored.

Selecting other route

1. Press the Altrenative Route button.

2. Other routes can be selected by pressing the ◀ or ▶ buttons.

PART 3 NAVIGATION SYSTEM

Route guidance

Route menu screen and functions

Press the ROUTE key on the control panel.
The ROUTE menu screen will be displayed.

ⓐ Cancel Route: deletes destination, waypoints and terminates route guidance.
[Finishing route guidance], page 3-30 .

ⓑ Route Overview: displays the entire route and route detailed.
[Route overview], page 3-31 .

ⓒ Route Option: the route option can be changed.
[Changing Route option], page 3-32 .

ⓓ Edit Waypoint: waypoints can be added/deleted and the order can be changed.
[Editing waypoints], page 3-32 .

ⓔ Detour : searches detour routes.
[Setting detour distance], page 3-35 .

ⓕ Avoid Streets: searches routes which avoid the selected streets.
[Setting avoid streets on route], page 3-35.

Finishing route guidance (Delete Destination)

1. Press the ROUTE key.

2. Press the Cancel Route button.

3. Press the Yes button.
The destination and waypoints are deleted and the route guidance is terminated.
[Finishing route guidance], page 3-30 .

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Cancel route"
   (Terminates route guidance and deletes the set destination and waypoints.)

Route overview (View Entire Route)

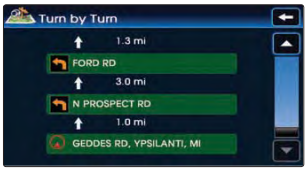
1. Press the ROUTE key.

2. Press the Route Overview button.

3. Press the Turn by Turn button.

INFORMATION

If the Return to guidance button is pressed, route guidance screen is displayed.



4. The detailed route information can be viewed

PART 3 NAVIGATION SYSTEM

Changing Route option

1. Press the ROUTE key.

2. Press the Route Option button.

3. Press the button for the desired route guidance method.
   Guidance will be restarted after recalculating the route with the selected guidance method.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Replan recommended route"
   "Replan shortest route"

Editing waypoints

Adding waypoints

There are 2 ways to add waypoints - (a) searching for POI nearest to the route, (b) using advanced search.

1. Press the ROUTE key.

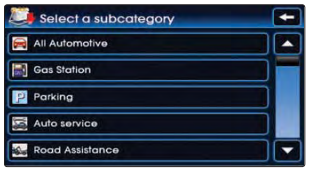
2. Press the Edit Waypoint button.

3. Press the Press to add new waypoint button.

(a) Searching POI lists near route

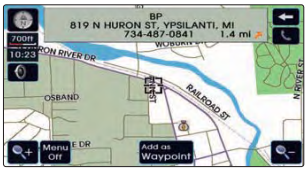
4. Press the Near POI Lists on Route button.

5. Select the desired category.



6. Select the desired sub category from list.

7. Select the desired POI from the list.
   The corresponding position will be displayed on the map.



8. Press the Add as Waypoint button.

9. Press the Done button to complete.
   Guidance will restart after recalculating the route.

(b) Using advanced Search

The method for searching waypoints through the Advanced(more) button is the same method as searching destination.

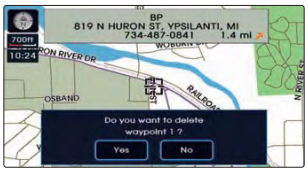
[Searching a Destination], page 3-13.

Deleting waypoints

1. Press the ROUTE key.

2. Press the Edit waypoint button.

3. Select the waypoint and press the Delete button.



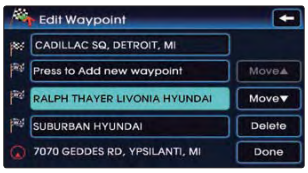
4. Press the Yes button.

5. After deleting, press the Done button to complete.
   Guidance will be restart after recalculating the route.

Re-ordering waypoints

1. Press the ROUTE key.

2. Press the Edit waypoint button.



3. Select the desired waypoint and use the Move ▲, Move ▼ buttons to change the order.

4. Once re-ordering is complete, press the Done button to complete.
   Guidance will restart after recalculating the route.

Setting detour distance

1. Press the ROUTE key.

2. Press the Detour button.

3. Select the desired detour range.
   Guidance will restart after recalculating the detour route.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Detour <1 or 2 or 5 or 10> miles"
   "Detour <1 or 2 or 5 or 10> kilometers"

Setting avoid streets on route

1. Press the ROUTE key.

2. Press the Avoid streets button.

3. Select the desired streets to avoid(avoid, allow) and press the Done button to complete.
   Guidance will restarted after recalculating the route to avoid the selected streets.

PART 3 NAVIGATION SYSTEM

Setup and Information

Setup menu screen and functions

Press the SETUP key on the control panel to display the setup menu screen.

ⓐ Main button : changes to the input keyboard type, voice command feedback ON/OFF settings and system initialization can be made.
[Main setting], page 3-36 .

ⓑ Voice Setup button : adjusts the Navigation guidance volume.
[Voice guidance volume setting], page 3-51.

ⓒ Navigation button : navigation related settings can be set.
[Navigation setting], page 3-38 .

ⓓ Clock Setup button

ⓔ My Places button : the Address book, Home address, Favorite places, Previous destination can be edited.
[My places setting], page 3-43 .

ⓕ Help button : the help contents can be viewed. [Help], page 3-54 .

ⓖ Traffic Setup : sets whether to display traffic information on map, whether to provide upcoming traffic information voice guidance, and whether to display the detour route popup showing upcoming traffic information.

Main setting

1. Press the SETUP key.

2. Press the Main button.

3. Select the desired changes and press the Done button to complete.

Setting keyboard for inputting letter

Press the desired keyboard type button. The selection will be highlighted.

Setting voice command feedback ON/ OFF

Press the desired setting button.

Setting Language

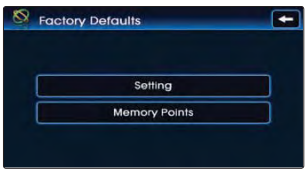
1. Press the Change button.

2. Press the desired language.

3. Press the Done button to complete.

Initializing system

1. Press the Factory Default button.



2. Press the menu desired for initialization.

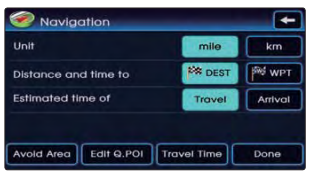
3. Press the Yes butto

PART 3 NAVIGATION SYSTEM

Navigation setting

1. Press the SETUP key.

2. Press the Navigation button.



3. Select the desired changes and press the Done button to complete.

Setting units (mile/ km)

Select the desired distance unit.

Setting arrival time and distance display

Select the desired setting button.

Registering avoid area

1. Press the Avoid Area button.

2. Press the Add new avoid area button.

3. Set the start position of the avoid area and press the Next button.

4. Set the end position of the avoid area and press the Next button.

5. Press the Done button to complete.

6. If the Avoid area needs to be renamed, press the Rename button.

7. Rename the Avoid area and Press the Done button to complete.

8. Each time the Avoid button is pressed, the function will switch between avoid ( )or allow( ).

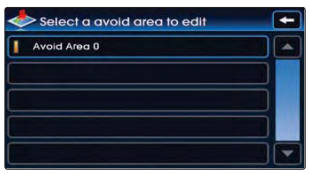
9. Press the Done button to complete the setting.

PART 3 NAVIGATION SYSTEM

Editing avoid area

1. Press the Avoid area button.

2. Press the Edit avoid area button.



3. Select the Avoid area button to edit.

4. If the Avoid area needs to be renamed, press the Rename button.

5. Rename the Avoid area and press the Done button to complete.

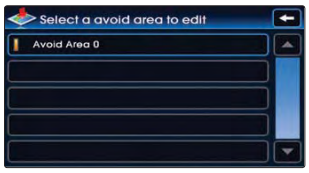
6. Each time the Avoid button is pressed, the function will switch between avoid( )or allow( ).

7. Press the Done button once editing is complete.

Deleting avoid area

1. Press the Avoid area button.

2. Press the Edit avoid area button.



3. Select the Avoid area button to delete.

4. Press the Delete button.

5. Press the Yes button.

Deleting all avoid areas

1. Press the Avoid area button.

2 . Press the Delete all avoid area button.

3. Press the Yes button.

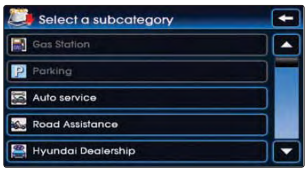
PART 3 NAVIGATION SYSTEM

Setting Q.POI icons

1. Press the Edit Q.POI button.

2. Select the desired menu.

3. Select the desired category.



4. Select the desired sub category.

5. Press the Done button to complete.

INFORMATION

Q.POI stands for Quick POI and refers to the function which turns POI icon display on or off on the map.

Setting estimate travel time

1. Press the Travel Time button.

2. Press the ◀ or ▶ button on the Residential, Main street, and Freeway controls to adjust the speed.
Press the Default button to set the speeds to the default settings.

3. Press the Done button to complete the setting.

My places setting

Registering new address in address book

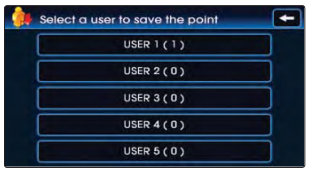
There are 3 ways to register a new address in the address book - (a) by DEST menu, (b) by registering address in address book, (c) from map scroll.

(a) by DEST menu

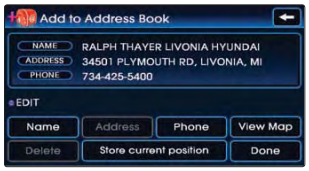
1. Press the DEST key.

2. Search through the desired method.
   The search process is the same as the method for destination search.
   [Searching a destination], page 3-13.

3. Press the Add to Address Book button.



4. Press the desired address book (user) button.



5. Input the name and telephone information and press the Done button to complete.
   [Editing an address of address book], page 3-45.

(b) by registering in the address book

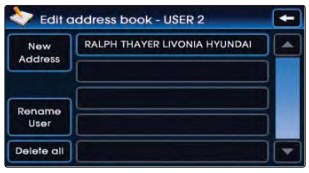
1. Press the SETUP key.

2. Press the My Places button.

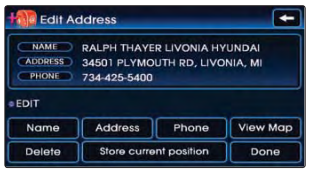
3. Press the Address Book button.

4. Press the desired address book (user) button.

PART 3 NAVIGATION SYSTEM



5. Press the New Address button.



6. Press the Address button to search the address.
   [Searching an address], page 3-13.

INFORMATION

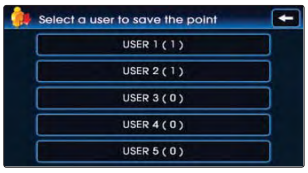
Press the Store current position button to input the address of the current position.

7. Input the name and telephone information and press the Done button to complete.
   [Editing an address of address book], page 3-45.

(c) from map scroll

1. In the map screen, scroll the map to the desired position.

2. Press the Add to Address Book button.



3. Press the desired address book (user) button.

4. Input the name and telephone information and press the Done button to complete.
   [Editing an address of address book], page 3-45.

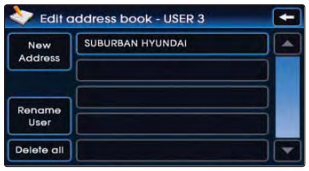
Editing an address of address book

1. Press the SETUP key.

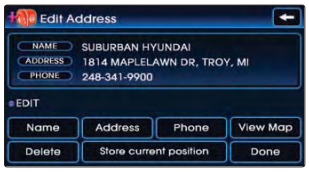
2. Press the My Places button.

3. Press the Address Book button.

4. Select the desired address book (user) button .



5. Select the desired address to edit.



6. Press the Name button to input the address name.

7. Input the address name and press the Done button to complete.

8. Press the Address button to search the address. The process is the same as the method for searching an address.
[Searching an Address] , page 3-13.

INFORMATION

Press the Store current position button to input the address of the current position.

PART 3 NAVIGATION SYSTEM

9. Press the Phone button to input the phone number.

10. Input the phone number and press the Done button to complete.

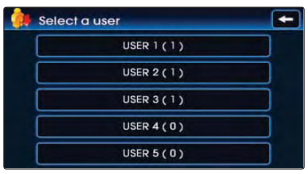
11. Press the Done button to complete.

Deleting an address of address book

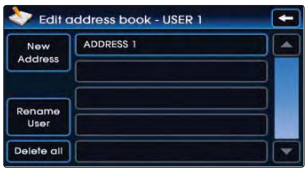
1. Press the SETUP key.

2. Press the My Places button.

3. Press the Address Book button.



4. Select the desired address book (user) button.



5. Select the desired address button to delete.

6. Press the Delete button.

7. Press the Yes button.

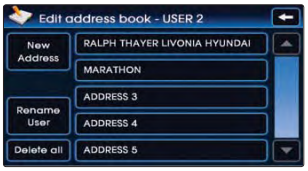
Deleting an address book

1. Press the SETUP key.

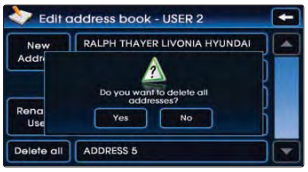
2. Press the My Places button.

3. Press the Address Book button.

4. Press the desired address book (user) button.



4. Press the Delete all button.



5. Press the Yes button.

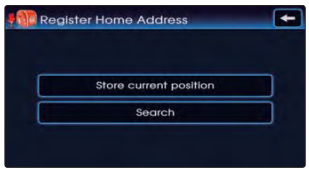
PART 3 NAVIGATION SYSTEM

Registering home address

1. Press the SETUP key.

2. Press the My Places button.

3. Press the Home Address button.

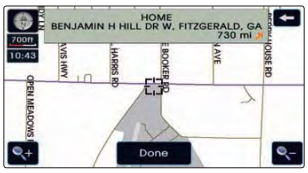


4. Press the Search button.

INFORMATION

Press the Store current position button to register the current position as Home.

5. Search the address.
   The process is the same method as searching an address.
   [Searching an Address], page 3-13.



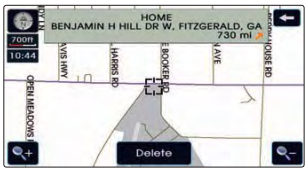
6. Press the Done button to complete.

Deleting home address

1. Press the SETUP key.

2. Press the My Places button.

3. Press the Home Address button.



4. Press the Delete button.

5. Press the Yes button.

Registering favorite place

1. Press the SETUP key.

2. Press the My Places button.

3. Press the Favorite Places button.

4. Press the number of the Favorite Place to register.

5. Press the Search button.

INFORMATION

Press the Store current position button to register the current position as a Favorite place.

6. Search the address.
   The process is the same as the method for searching an address.
   [Searching an Address], page 3-13.

PART 3 NAVIGATION SYSTEM

7. Press the Done button to complete.

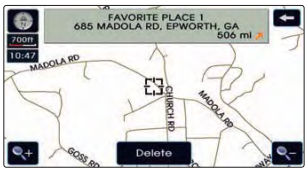
Deleting favorite place

1. Press the SETUP key.

2. Press the My places button.

3. Press the Favorite Places button.

4. Select the desired favorite place button to delete.



5. Press the Delete button.

6. Press the Yes button.

System information and update

1. Press the SETUP key.
2. Press the main button.
3. Press the System Info button.

Voice guidance volume setting

1. Press the SETUP key.
2. Press the Voice Setup button.

Voice guidance volume control

- Set the desired volume level by using the ◀ or ▶ buttons and press the Listen button to verify the volume level.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Voice Guidance Louder"
   "Voice Guidance Softer"

- Press the Mute button when voice guidance is unnecessary.
  Voice guidance can be turned back on by pressing the ◀ or ▶ buttons or pressing the Mute button.

Voice Command

1. Press the key on the steering Wheel remote controller.
2. After the beep sound, say a command.
   "Voice Guidance On"
   "Voice Guidance Of"

PART 3 NAVIGATION SYSTEM

Adaptive volume control ON/OFF

- Press the desired setting button.

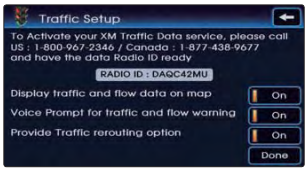
INFORMATION

Adaptive Volume Control

If the speed of the vehicle is over approximately 60 mi/h (100km/h), the volume level can be increased one level higher than the current level. If the speed of the vehicle falls under 60 mi/h (100km/h), the volume level will return to its original level.

Traffic Setup

1. Press the SETUP key.
2. Press the Traffic Setup button.
3. Select the desired changes and press the Done button.



INFORMATION

- Display Traffic and Flow data on Map : select whether to display traffic information on the map.
- Voice Prompt for traffic and flow warning : Decides whether to provide voice guidance in front of Traffic Information. (On route - 3mile)
- Display Detour pop-up message : Decides whether to display Detour pop up in front of Traffic Information. (On route - 3mile)

Traffic Information

(a) Viewing Traffic Information

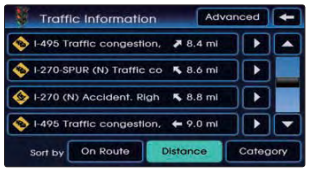
1. When the Traffic option is active, press the button on the Map screen.

Traffic Flow INFORMATION

	Normal, Free Flowing (46 mph ~)
	Moderate Congestion (26 ~ 45 mph)
	Heavy Traffic, Stop and Go (0 ~ 25 mph)
	Road Construction
	Accident
	Congestion/Slow Traffic
	Incient
	Hazardous Road Conditions
	Travel Information

INFORMATION

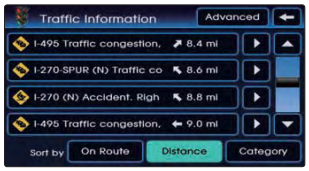
- Traffic information will be shown on the map up until the scale is ~4mile.
- Displays the traffic information around vehicle for up to a radius of 50 miles. (Information exceeding 50 miles will not be displayed)
- The above list can be sorted by either Distance (Default) or Category.



2. Select the desired List button.

3. The user can check points of accidents and traffic details.

(b) Changing Traffic Category



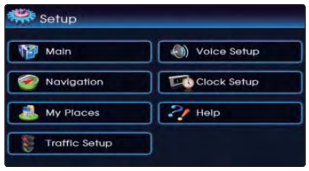
1. Press the Category Select button at No. 2.

2. After selecting the desired menu among the six menus, press the Done button to save. Once returning to the previous List screen, the corresponding Category list will be shown and maintained until Category information is changed.

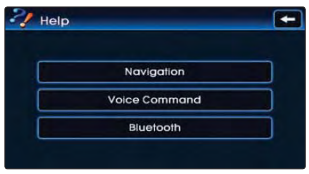
PART 3 NAVIGATION SYSTEM

Help

1. Press the SETUP key.

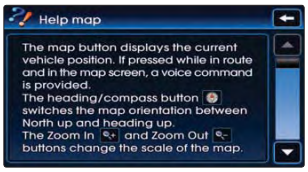


2. Press the Help button.



3. Press the Navigation button.

4. Press the desired Help menu button.



5. The full content of the help section can be viewed by using the top-down scroll buttons.

PART 4
XM DATA

XM Data mode 4-2
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XM Data mode screen and functions ... 4-2
Traffic data Service Information 4-2
Stock Data Service Information..... 4-3
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XM Data mode

The XM Data Service is a paid membership satellite radio service which provides users with traffic, stock, sports, and weather information. However, weather information is not supported for vehicles purchased in Canada. For information on registration or related content, please visit the XM radio website (www.xmradio.com).

Entering XM Data mode

1. From the current location map screen within the navigation, press the XM DATA button.

2. The main XM data service screen will be displayed. Within the main screen, there are four categories of Traffic, Stocks, Sports and Weather.

XM Data mode screen and functions

Traffic data Service Information

- Automatic route recalculation (guidance) according to changes in traffic conditions.
- Provides short-cuts for initially searched routes.
- Displays increased detour distance and estimated driving times.
- Displays icons by each traffic situation on the map.

1. Route calculation by incorporating actual road traffic conditions
- Incorporation of traffic information to route calculations is a user option which can be turned on or off by the user.

2. Displays Road Traffic situations
- RTM (Road Traffic Message) is a feature which displays symbols of icons for each type of road traffic condition, such as locations under construction, accidents, basic weather, and others on map locations based on Traffic information provided by XM.

3. Avoidance of locations where traffic situations have occurred.

- If a traffic situation occurs somewhere along the route, the route is recalculated to avoid such locations and an avoidance recalculation popup will be displayed.

4. Displays Traffic Event List

- A list providing details on accidents and an icon which will display the accident location are displayed. The user can view details by pressing on the list or move the map to the accident location by pressing on the accident icons.

Stock Data Service Information

XM Stock data Service is a service which provides real-time updated information on the NYSE, NASDAQ, and AMEX (approximately 11,000 symbols).

1. Press the Stocks button to display the Search screen where symbols can be searched. Input the name of the symbol you wish to search and press the List button to show search results.

2. For symbols which you are interested in, press the <Favorites> icon to save the symbol as a part of <My Favorite>. Saved symbols can be viewed from the My Favorites button on the Stock Main screen.

Sport Data Service Information

This service provides real-time updated information on scores and schedules for major sports, such as NFL, NBA, NCAA Football, NCAA Basketball, NHL, MLB, NASCAR and more.

1. Press the desired Sports button to view related sports information.

PART 4 XM DATA

2 . My teams

You can save teams which you are interested in as part of <My teams> to easily view related scores and schedules.

Within the <My teams> screen, teams can be added by pressing the Add button or deleted by pressing the 🗑 button.

Weather data Service Information

The Weather Service is a service which provides weather information updated every 5 minutes for your region.

The Weather Service includes Tabular Weather, Graphical Weather, Warnings and Advisories Services.

1 . Tabular Weather Service

- Provides current weather information and weather information for the coming next three days for your region.

To change the region, press the Other City button and select the desired region.

2 . Graphical Weather Service (Map button)

- This service provides weather information, such as Cloud, Fog, Rain, Snow, and Road Conditions on the Navigation map as symbols. Details can be viewed on specific regions by using the zoom in and zoom out features.

3 . Warning and Advisories Service

- This service provides weather warnings and advisories, such as Tornado, Storm, Flood, Winter etc. as symbols on the Navigation map. Details can be viewed on specific regions by using the zoom in and zoom out features.

PART 5
VOICE COMMAND SYSTEM

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Basic operation for voice command control 5-2
Voice command Help 5-3

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Operating voice command

Condition for voice command system

Most of the functions within the AV and Navigation system can be operated by voice. Please follow the following instructions for optimal voice recognition performance.

- Close all windows and the sunroof. The performance of the voice recognition can be improved if the environment of the car interior is quiet.
- Press the voice recognition button and say the desired voice command after the sound of the beep.
- The microphone is positioned above the driver so that voice commands can be spoken while maintaining a proper posture.
- Pronounce the voice commands naturally and clearly as if in a normal conversation.

Basic operation for voice command control

1. Press the key on the steering wheel remote controller. A voice command window will be displayed on the lower side of the screen followed by a "Command please" system voice comment.

INFORMATION

The System voice comment "Command Please" will not be provided when the Voice prompt is turned OFF.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say the desired voice command (ex : previous destination)
[Voice command list], page 5-6.
[Searching destination by voice command], page 5-19.

If the exact command is not known, use the "Help" command to view the commands list in detail.

INFORMATION

Press the key shortly to input a voice command from among the system voice comments. The system voice instruction comment will immediately terminate. When the icon changes into the icon with a beep sound, input the desired voice command.

3. The inputted command is fed back to the screen and voice system. If the command was not recognized properly, say "Back".

INFORMATION

- The commands which can currently be inputted are displayed on the screen in yellow.
- To terminate the voice recognition system, either say "cancel" or press the key for over 0.8 second.
- Be aware that during the operation of the voice recognition system, pressing the hard keys or the screen will terminate the voice recognition system.

Voice command Help

1. Press the key on the steering wheel remote controller. A voice command window will be displayed on the lower side of the screen followed by a "Command please" system voice comment.

INFORMATION

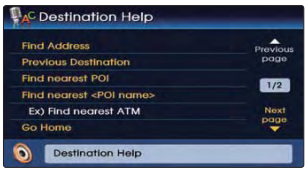
The System voice comment "Command Please" will not be provided when the Voice prompt is turned OFF.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Help". If the proper Help menu is already known, voice commands, such as "destination help" can be inputted directly.

INFORMATION

The "help" command can be used even while voice recognition dialogue is operating. At such time, help instructions appropriate to the state of the dialogue will be provided.

3. Say the name of the desired menu. (ex : "Destination help")



4. Say the desired voice command.

PART 5 VOICE COMMAND SYSTEM

Setting up the voice command system

Setting voice Prompt ON/OFF

- Voice prompt ON : All system prompts are provided.
- Voice prompt OFF : Most of the system prompts are not provided.

1. Press the key on the steering wheel remote controller.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Voice setup." The "voice prompt on" or "voice prompt off" can be directly inputted if the current state is already known.

3. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Voice Prompt on".

INFORMATION

In the Voice Setup Help screen, the commands possible for input within the current mode are displayed. For example, if the Voice prompt is currently in Off state, then the command Voice prompt ON will be displayed on the screen.

Speaker adaptation

1. Press the key on the steering wheel remote controller.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Voice setup." Or the "Speaker adaptation" command can be directly inputted.

3. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Speaker adaptation".

4. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Yes".

5. Listen and repeat the 20 commands (approximate) as instructed by the device.

- Reset Speaker adaptation: Returns to previous state prior to applying Speaker adaptation.

1. Press the key on the steering wheel remote controller.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Reset Speaker adaptation".

PART 5 VOICE COMMAND SYSTEM

Voice command list

The voice commands for this system are divided into Global commands and Local commands.

- Global command (●) : Commands which operate in all operating modes.
- Local command (○) : Commands which operate only when the corresponding mode is operating or when the mode screen to the corresponding mode is displayed.

Command list of Audio system

FM/AM Radio

	Command	Operation
●	Radio	Plays the most recent frequency for the most recently operated band.
●	(Radio) AM	Plays the most recent frequency for the corresponding band.
●	(Radio) FM	Plays the most recent frequency for the corresponding band. In the case of FM, the most recent frequency within the most recently played FM1 or FM2 band is played.
●	FM <1 or 2>	Plays the most recent frequency for the corresponding band.
●	AM frequency <530 to 1710> (ex. AM frequency 1310)	Plays the desired AM band frequency.
●	FM frequency <87.5 to 107.9> (ex. FM frequency 99.1)	Plays the desired FM band frequency.
●	AM Preset <1 to 6>	Plays the desired AM band preset frequency.
●	FM <1 or 2> Preset <1 to 6>	Plays the desired preset frequency of FM1 or FM2 band.
○	Preset <1 to 6>	Plays the desired preset frequency for the current band.
○	Seek Up	Searches and plays the next frequency of the current band.

	Command	Operation
○	Seek Down	Searches and plays the previous frequency of the current band.
○	Preset Up	Plays the next preset frequency of the current band.
○	Preset Down	Plays the previous preset frequency of the current.
○	Scan	Scans all frequencies within the current band.
○	Preset Scan	Scans the 6 preset frequencies of the current band.
○	Auto Preset / Auto Store	Searches all frequencies within the current band and stores the 6 frequencies with the most superior reception as preset buttons.

XM Radio

	Command	Operation
●	XM	Plays the last channel within the last band from XM1, XM2, and XM3.
●	XM <1 or 2 or 3>	Plays the most recent channel for the corresponding Band.
●	XM Channel <0 to 255>	Plays the desired XM band channel.
●	XM <1 or 2 or 3> Preset <1 to 6>	Plays the desired preset channel for XM1 or XM2 or XM3 band.
○	Channel < 0 to 255 >	Plays the desired channel of the current band.
○	Preset <1 to 6>	Plays the desired preset channel of the current band.
○	Channel Up	Plays the next channel of the current band.
○	Channel Down	Plays the previous channel of the current band.

PART 5 VOICE COMMAND SYSTEM

	Command	Operation
○	Preset Up	Plays the next preset channel of the current band.
○	Preset Down	Plays the previous preset channel of the current band.
○	Scan	Scans all channels within the current band.
○	Preset Scan	Scans all preset channels within the current band.

CD

	Command	Operation
●	DISC	Plays the DISC already inserted in the CDP.
●	CD	If the DISC inserted in the CDP is either a CD or MP3 DISC, then the CD or MP3 will be played.
●	CD track <1 to 665>	If the DISC inserted in the CDP is a CD, then CD Mode will start and plays the desired track.
○	Track <1 to 665>	Plays the desired track.
○	Next track	Plays the next track.
○	Previous track	Plays the previous track.
○	Scan	Scans all tracks on the CD DISC.
○	Repeat track	Repeats the current playing track.
○	Random	Plays the tracks of the CD DISC in random order.
○	Normal play	Turns off the Scan, Repeat, and Random functions.

MP3

	Command	Operation
●	DISC	Plays the DISC already inserted into the CDP.
●	CD	If the DISC inserted in the CDP is either a CD or MP3 DISC, then the CD or MP3 will be played.
●	MP3	If the DISC inserted in the CDP is an MP3 DISC, then the MP3 will be played.
○	Next file	Plays the next file.
○	Previous file	Plays the previous file.
○	Next folder	Plays the first file in the next folder.
○	Previous folder	Plays the first file in the previous folder.
○	Scan	Scans all files within the MP3 DISC.
○	Folder Scan	Plays all songs in the folder in which the current playing file is located for 10 seconds each.
○	Repeat File	Repeats the current playing file.
○	Repeat Folder	Repeats all tracks within the current playing folder.
○	Random	Plays all files within the MP3 DISC in random order.
○	Random Folder	Plays all files within the current playing folder in random order.
○	Normal play	Turns off the Scan, Repeat, and Random functions.

PART 5 VOICE COMMAND SYSTEM

USB MP3

	Command	Operation
●	USB	If the USB has been connected to the device, plays the MP3 files within the USB.
○	Next file	Plays the next file..
○	Previous file	Plays the previous file.
○	Next folder	Plays the first chapter of the next folder.
○	Previous folder	Plays the first chapter of the previous folder.
○	Scan	Scans all files within the USB.
○	Folder Scan	Plays all songs in the folder in which the current playing file is located for 10 seconds each.
○	Repeat File	Repeats the current playing file.
○	Repeat Folder	Repeats all songs within the current playing folder.
○	Random	Plays all files within the USB in random order.
○	Random Folder	Plays all files within the current playing folder in random order.
○	Normal play	Turns off the Scan, Repeat, and Random functions.

USB IMAGE

	Command	Operation
●	USB	If the USB IMAGE has been connected to the device, plays the image files within the USB.
○	Next file	Moves to the next file.
○	Previous File	Moves to the previous file.

	Command	Operation
○	Next folder	Moves to the next folder.
○	Previous folder	Moves to the previous folder.

iPod

	Command	Operation
●	iPod	Plays the songs within the iPod if the iPod has been connected to the device.
○	Next song	Plays the next song.
○	Previous song	Plays the previous song.
○	Repeat song	Repeats the current playing song.
○	Random	Plays all songs within the iPod in random order.
○	Random Album	Plays all songs within the current playing album in random order.
○	Normal play	Turns off the Repeat and Random functions.

Others

	Command	Operation
●	Line in	Plays the unit connected with the AUX terminal.
●	Audio on	Turns on the Audio/Video.
●	Audio off	Turns off the Audio/Video.

PART 5 VOICE COMMAND SYSTEM

Command list of Navigation system

Navigation commands will operate only agreeing to the terms and conditions for the Navigation system.

Map

	Command	Operation
●	Map Current location	Displays the current position of the vehicle.
●	Zoom In	Decreases the map zoom by one level.
●	Zoom Out	Increases the map zoom by one level.
●	Zoom minimum	Displays the map screen in the maximum zoom level.
●	Zoom maximum	Displays the map screen in the minimum zoom level.
●	Zoom level <1 to 14>	Displays the map in the zoom level selected from the 14 levels.
●	Zoom <scale factor>	Displays the map in the corresponding zoom.
	150 feet / 50 meters 300 feet /100 meters 700 feet / 200 meters 0.25 miles / 400 meters 0.5 miles / 800 meters 1 mile / 1.6 kilometers 2 miles / 3.2 kilometers 4 miles / 6.4 kilometers 8 miles / 12 kilometers	

	Command	Operation
	16 miles / 25 kilometers 32 miles / 50 kilometers 64 miles / 100 kilometers 130 miles / 200 kilometers 250 miles / 400 kilometers (ex.Zoom 0.25 miles, zoom 400 meters)	
○	North up	Displays the map in North Up mode.
○	Heading up	Displays the map in Heading Up mode.
○	Show <POI name> (ex. Show ATM)	Displays the selected POI categories. [POI Category list], page 5-17.
○	Hide <POI name> (ex. Hide ATM)	Hides the selected POI categories. [POI Category list], page 5-17.
○	Hide all	Hides all POI categories.
○	Daylight mode	Converts the map display into daylight mode.
○	Night mode	Converts the map display into night mode.
○	Auto mode	Converts the map display is between daylight/night modes automatically.

PART 5 VOICE COMMAND SYSTEM

Destination

	Command	Operation
●	Find address	Sets the destination through address search for route guidance.
●	Find nearest POI	Sets a POI near the current position as the destination for route guidance through POI category search.
●	Find nearest <POI name>	Sets a POI near the current position as the destination by directly inputting the POI name for route guidance. [POI Category list], page 5-17.
●	Destination POI by phone number	Sets the destination by searching the phone number of the facility.
●	Find Emergency <Category> (ex. Find Emergency Hospital)	Searches for an emergency facility which is nearby the current position and sets it as the destination for route guidance. Emergency facilities are police stations, hospitals, and dealerships.
●	Destination by address book	Sets one of the list of previously registered addresses in the address book for the user as the destination.
●	Previous destination	Sets one of the previous destination as the current destination.
●	Previous start point	Sets the previous start point as the current destination.
●	Go home	Sets the previously registered home address as the destination for route guidance.
●	Destination by memory point <1 to 5>	Sets a previously registered memory point as the destination for route guidance

Route

	Command	Operation
●	Cancel route	Deletes the designated destination and terminates the route guidance.
●	Repeat voice guidance	Repeats the route guidance.
●	Detour <1 or 2 or 5 or 10> miles	Searches detour routes within a <1|2|5|10> mile radius.
●	Detour <1 or 2 or 5 or 10> kilometers	Searches detour routes within a <1|2|5|10> kilometer radius.
●	Replan recommended route	Recalculates the route with the recommended route.
●	Replan shortest route	Recalculates the route with the shortest route.
●	Distance to destination	Reports the remaining distance until destination by voice.
●	Time to destination	Reports the remaining time until destination by voice.
○	View route	If the destination has been set, displays the whole route screen until the destination.
○	Start guidance	Sets the scroll mark displayed on the map as the destination and starts route guidance.

PART 5 VOICE COMMAND SYSTEM

Others

	Command	Operation
●	Voice guidance on	Turns the Voice Guidance On.
●	Voice guidance off	Turns the Voice Guidance Off.
●	Voice guidance louder	Increases the Voice Guidance volume by 1 level.
●	Voice guidance softer	Decrease the Voice Guidance volume by 1 level.
●	Store marked location to <text tag> (ex. Store marked location to user 1)	Registers the selected location into the selected Address book.

• POI Category list

All restaurants	Car Wash	Home Specialty Store	Court House
Fast Food restaurant	Motorcycle Dealership	Clothing shop	Fire Department
American restaurant	All Travel	Shoe Store	Convention Center
French restaurant	Airport	Pharmacy	City Hall
Italian restaurant	Hotel	All Recreation	Civic Center
Continental restaurant	Tourist Information	Amusement Park	School
Mexican restaurant	Travel Agent	Museum	Government Offices
Japanese restaurant	Tourist Attraction	Cinema	Waste & Sanitary
Chinese restaurant	City Cnter	Sports Activities	Utilities
Korean restaurant	Rental Car Agency	Sports Complex	All Services
Vegetarian Food restaurant	Campground	Golf Course	Hospital
Seafood restaurant	Ferry Terminal	Winery	Dentist
Latin American restaurant	Bus Station	Video & Game Rental	Photography
Asian restaurant	Local Transit	Ski Resort	Tax Service
African restaurant	Train Station	Recreation Area	Medical Service
Coffee Shop	All Shopping	Other Recreation	Attorney
Other restaurants	Department Store	All Financial Service	Funeral Director
All automotive	Convenience Store	Bank	Hair & Beauty
Gas Station	Shopping Center	ATM	Cleaning & Laundry
Parking	Music Store	Check Cashing Service	Social Service
Auto service	Grocery Store	Money Transfer	Physician
Road Assistance	Bookstore	Business Facility	Communication services
Hyundai Dealership	Electronics Store	All Community	Tailor & Alteration
Automobile Dealership	Hardware Store	Police Station	Mover services
Auto Parts	Gifts shop	Post Office	
Rest Area	Sporting Goods store	Library	

PART 5 VOICE COMMAND SYSTEM

Command list of Phone

Command		Operation
●	Call Name	Makes the call to the name.
●	Dial Number	makes the callto the number.
●	Redial	The recently called number is redialed.
●	Recent Calls	The user can select a number from the outgoing, incoming, and missed calls.

Command list of Help

Command		Operation
●	Help	Displays the main Help screen.
●	Destination Help	Displays the Destination related command list.
●	Map Help	Displays the Map related command list.
●	Radio Help	Displays the FM/AM radio related command list.
●	XM Help	Displays the XM radio related command list.
●	Disc Help	Displays the DISC mode related command list for the disc inserted in the CDP.
●	iPod Help	Displays the iPod related Command list.
●	USB Help	Displays the USB related command list.
●	Phone Help	Displays the Phone help screen.
●	Voice setup Help	Displays the Voice prompt settings and speaker-adaptive commands on the screen.

Searching destination by voice command

Find address

Sets the destination through address search for route guidance.

1. Press the key on the steering wheel remote controller.

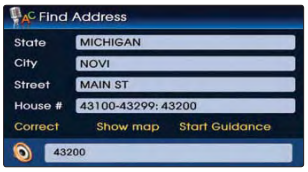
2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Find address".

3. Say "Change state" to change the state.

4. Say the state name.

5. Say the city name.

6. Say the street name.



7. Say the House number. Here, the range which can be inputted will be displayed.

8. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

PART 5 VOICE COMMAND SYSTEM

INFORMACIÓN

Spell recognition

- It is possible to search the state, city, street names through the text line inputted by the user.
- To enter spell search mode, say the "Spell 000" command as displayed on the screen.
- Text lines can be inputted continuously.

Pick-List(n-best list)

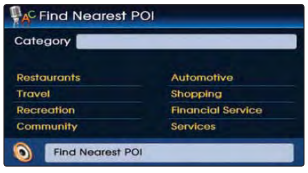
- If there are more than one voice result, then a pick-list which can be selected by the user will be displayed.
- There may be more than one list page. The desired page can be viewed by using commands such as "next page" or "previous page".
- Here, the "Line + number" voice command can be used to select the desired result, such as "Line one". Pressing the desired result is not supported.
- Also, selectable areas will be highlighted in yellow, allowing the user to easily see which results can be selected.

Find nearest POI

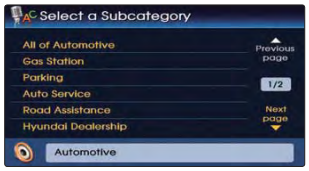
Sets a POI near the current position as the destination for route guidance through POI category search.

1. Press the key on the steering wheel remote controller.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "find nearest POI".

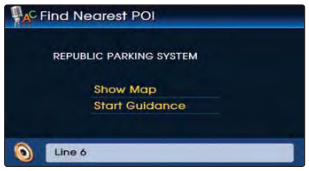


3. Select the desired main category.



4. Select the desired sub category.

5. Select the desired POI from the list and say the line number for the corresponding menu. Ex) "Line 1".



6. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

Find nearest <POI name>

Sets a POI near the current position as the destination by directly inputting the POI name for route guidance.

1. Press the key on the steering wheel remote controller.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Find nearest Parking".

3. Select the desired POI from the list and say the line number for the corresponding menu. Ex) "Line 1".

PART 5 VOICE COMMAND SYSTEM

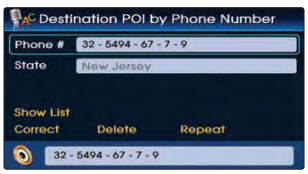
4. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

Destination POI by phone number

Sets the destination by searching the phone number of the facility.

1. Press the key on the steering wheel remote controller.

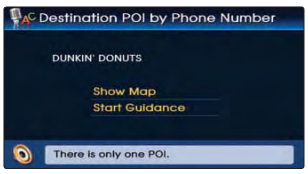
2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Destination POI by Phone number".



3. Input the 10 numbers for the phone number.

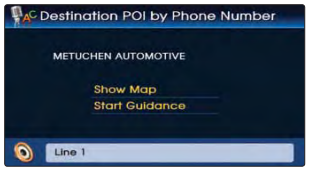
INFORMATION

Continuous recognition of phone numbers is possible, and the recognized result will be displayed in block units. To correct a block unit, say "correct". To delete the entire result, say "delete". To have the input read back, say "repeat".



4. Say "Show list" to view the resulting search list.

5. Select the desired location from the list and say the line command.



6. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

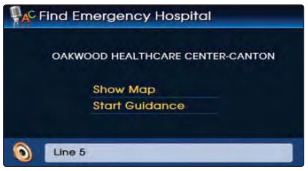
Find emergency <Category> :

Searches for an emergency facility which is nearby the current position and sets it as the destination for route guidance. Emergency facilities are police stations, hospitals, and dealerships.

1. Press the key on the steering wheel remote controller.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say the voice command.
ex)"Find emergency hospital"

3. Select the desired location from the list and say the line command.



4. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

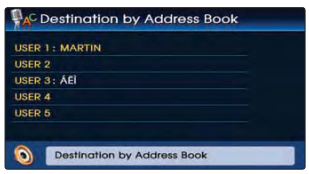
PART 5 VOICE COMMAND SYSTEM

Destination by address book

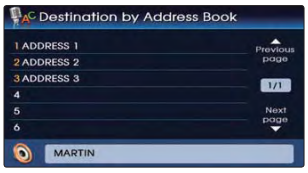
Sets one of the list of previously registered addresses in the address book for the user as the destination.

1. Press the key on the steering wheel remote controller.

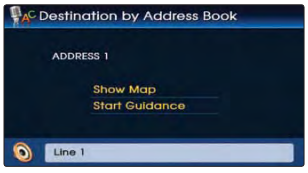
2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Destination by address book".



3. Select the desired user name(Address book name).



4. Select the desired location from the list and say the line command.



5. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

Previous destination

Sets one of the previous destination as the current destination.

1. Press the key on the steering wheel remote controller.

2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Previous destination".

3. Select the desired location from the list and say the line command.

4. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

Previous start point

Sets the previous start point as the current destination.

1. Press the key on the steering wheel remote controller.
2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Previous start point".

3. Say "Start guidance" if guidance to the selected position is desired, or say "Show map" to verify the location of the selected position on the map.

Go home

Sets the previously registered home address as the destination for route guidance.

1. Press the key on the steering wheel remote controller.
2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Go home".

Destination by memory point <1 to 5>

Sets a previously registered memory point as the destination for route guidance.

1. Press the key on the steering wheel remote controller.
2. Once the icon changes into the icon on the pop-up screen with a beep sound, say "Destination by memory point 1".

PART 6 BLUETOOTH HANDSFREE

PART 6
BLUETOOTH HANDSFREE

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BLUETOOTH HANDSFREE

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Before using the Bluetooth Handsfree

What is Bluetooth?

- Bluetooth allows wireless transmission of information between PC, mobile phones, headsets, PDAs, printers and other devices within close ranges by using 2.45Ghz frequency short-distance wireless telecommunication technologies.
- Within this vehicle, users can make handsfree calls, transmit mobile phone data, and play audio streaming files by connecting a mobile phone with the system.

Bluetooth®

Bluetooth is a trademark owned by Bluetooth SIG, Inc.

Functions supported by Bluetooth Handsfree

- Pairing mobile phones (Up to 5 phones)
- Connecting/disconnecting mobile phones
- Making/Answering phone calls
- Downloading a Phone Book
- Downloading a Call history list
- Playing music saved in a Bluetooth phone in the vehicle

Some functions may not be supported in some mobile phone.

Converting Bluetooth Handsfree mode

Converting from AV/Navigation mode to Bluetooth Handsfree mode

1. While in AV mode or Navigation mode, press the PHONE key or the key on the steering wheel.

2. The system will change to Bluetooth Handsfree mode and display the PHONE screen.

3. The following screen will become displayed if no mobile phone has been connected.

Converting from Bluetooth Handsfree mode to AV/ Navigation mode

1. While in Bluetooth Handsfree mode, press an AV/Navigation mode key, such as FM/AM or MAPVOICE.

2. The corresponding mode will be displayed.

INFORMATION

Most of the functions of the AV or SETUP modes are not supported while on a Bluetooth Handsfree call. The call volume and Navigation (MAPVOICE, DEST, ROUTE) screens can be operated.

PART 6 BLUETOOTH HANDSFREE

Pairing and connecting a Bluetooth phone

Pairing a mobile phone

1. Press the Settings button on the PHONE screen.

2. Press the Pairings button on the Settings screen.

3. The list of currently paired phones will be displayed. Press the Add to button to pair a new mobile phone.

INFORMATION

For safety reasons, pairing a Bluetooth phone is not possible when the vehicle is in motion. Park the vehicle in a safe location to pair a new phone. It is possible to pair up to five mobile phones. In order to pair a new phone when there are already five mobile phones paired, you must first delete one of the previously paired phones.

4. From the Bluetooth device list within the mobile phone, add the car handsfree. The default name of the car system is SONATA.
For more information on registering Bluetooth devices from the mobile phone, please refer to the mobile phone user's manual.

INFORMATION

While conducting a Bluetooth device search from the mobile phone, operating to another screen will prevent the car handsfree from being found in the mobile phone. Always conduct searches for Bluetooth devices with the Search Bluetooth device screen displayed.

5. When pairing the car handsfree from the mobile phone, a passkey input window will become displayed on the mobile phone screen. Input the passkey set within the car system into the mobile phone input window. (The factory state passkey is 0000.) As shown in the figure, once the passkey becomes successfully inputted, the Bluetooth connection between the car system and mobile phone will start.

6. Once Bluetooth connection is successful, the name of the connected mobile phone will become displayed on the PHONE screen and Bluetooth handsfree functions will operate.

INFORMATION

Some functions may not be supported due to limited Bluetooth compatibility between the car system and mobile phone.

PART 6 BLUETOOTH HANDSFREE

Deleting a paired phone

1. Press the Settings button on the PHONE screen.

2. Press the Pairings button on the Settings screen.

3. The list of currently paired phones will be displayed. Select the phone you wish to delete from the list and press the Delete button.

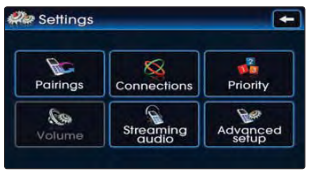
4. A pop-up asking whether you wish to delete the paired phone will be displayed. Press the Yes button to delete the paired phone and the No button to cancel.

⚠ CAUTION!

A mobile phone cannot be deleted if it is currently connected to the car system.
To delete the phone, first disconnect the mobile phone and try again.

Connecting a mobile phone

1. Press the Settings button on the PHONE screen.



2. Press the Connections button on the Settings screen.

3. The list of currently paired phones will be displayed. Select the phone you wish to connect from the list and press the Connect button.

INFORMATION

When there are no paired phones, pair the mobile phone through [Settings>Pairings> Add to]. For more information on pairing mobile phones, refer to the user's manual [Pairing and Connecting a Bluetooth phone > Pairing a mobile phone].

4. The Bluetooth connection between the car system and mobile phone will start.

5. Once Bluetooth connection is successful, the name of the connected mobile phone will become displayed on the PHONE screen and Bluetooth handsfree functions will operate.

PART 6 BLUETOOTH HANDSFREE

4. If the connection between the mobile phone and Bluetooth fails, the following pop-up will be displayed. If problems occur while connecting Bluetooth, check for the following conditions.

- Whether the mobile phone you wish to connect is in the vicinity of the car system
- Whether the power of the mobile phone Bluetooth has been turned off
- Whether the mobile phone Bluetooth has been set to hidden state
- Whether there are Bluetooth compatibility issues between the car system and another mobile phone

Disconnecting a mobile phone

1. Press the Settings button on the PHONE screen.

2. Press the Connections button on the Settings screen.

3. The list of currently paired phones will be displayed. Select the phone you wish to disconnect from the list and press the Disconnect button.

4. pop-up asking whether you wish to disconnect the mobile phone will be displayed. Press the Yes button to disconnect the mobile phone and the No button to cancel.

Bluetooth Handsfree screen layout

Bluetooth Handsfree screen and functions

When there is no mobile phone connected

1 Settings :the user can set environment settings for the Bluetooth handsfree, such as pair/delete mobile phone, connect/ disconnect mobile phone, set call volume, change device name and change passkey.

When a mobile phone is connected

2 Phone battery charge status : displays the battery charge status of the connected mobile phone. The battery charge status may not be displayed in some mobile phones.

3 Signal strength : displays the mobile phone signal strength. The signal strength may not be displayed in some mobile phones.

4 Bluetooth connection state : becomes displayed when a Bluetooth phone has been connected with the car system.

5 Name of connected mobile phone : displays the name of the connected mobile phone.

6 Phone number input window : displays the inputted phone number.

7 Dial : input the phone number through the dial pad.

8 SEND : if a number has not been inputted into the phone number input window, then displays the call history list screen.

9 Del : deletes the inputted number one digit at a time.

10 END : if a number has been inputted, then erases the entire number.

11 Contacts : displays the phone book screen. The user can search previously saved phone numbers.

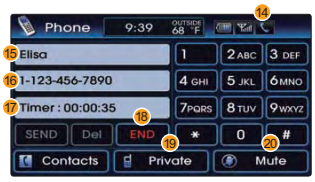
PART 6 BLUETOOTH HANDSFREE

When receiving an incoming call

12 Accept : accepts the incoming call.

13 Reject : rejects the incoming call.

When already on a call



14 Busy icon : when already on a call, displays an icon shaped like a receiver.

15 Name of incoming caller : displays the name of incoming caller. The name of the incoming caller will not be displayed if the caller's phone number has not been previously registered in the phone book.

16 Number of incoming caller : displays the number of the incoming caller.

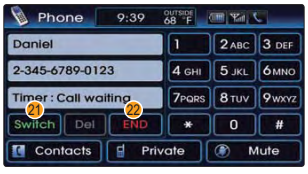
17 Call state : displays the call state, such as talk time, phone connection, and end time.

18 END : ends the call.

19 Private : when talking on the car handsfree, use this function to switch the call to the mobile phone. Press this button and the following screen will be displayed. The speaker and microphone will be switched to the mobile phone.

20 Mute : use this function to mute the outgoing volume. Pressing the Mute button will display the at the top right side of the screen and the caller will not be able to hear the conversation taking place in the car. Press the Mute button again to release the Mute function.

When there is a call waiting



21 Switch : use this button to switch between callers when there are calls on call waiting.

22 END : use this button to end the calls with all callers.

Making a call

Making a call by dialing a phone number

1. Use the number pad on the right side of the PHONE screen to input the number you wish to call.

2. Press the SEND button or the key on the steering wheel to make the call.

INFORMATION

To modify, press the Del button to delete the inputted number one digit at a time.
Press the END button or the key on the steering wheel to cancel the call.

Making a call from Speed Dial

1. Use the number pad on the right side of the PHONE screen to input a speed dial number.

INFORMATION

Only speed dial numbers already stored on the mobile phone can be used for speed dial calls.
Up to 2-digit speed dial numbers are supported.

PART 6 BLUETOOTH HANDSFREE

2. Press the SEND button or the key on the steering wheel to make the call.

INFORMATION

For 2-digit speed dial numbers, press and hold the 2nd digit to make a call to the speed dial number.

Making a call by redialing

1. Press and hold (over 0.8 second) the SEND button on the PHONE screen or the key on the steering wheel.

INFORMATION

Redialing is not possible when there is no call history or the call history list is being downloaded from the mobile phone. When there is no call history list, the SEND button will be inactive.

2. The recently called number is redialed.

INFORMATION

It is not possible to display the AV mode and Settings screen when on a phone call. Only the call volume and Navigation (MAPVOICE, DEST, ROUTE) screens can be operated.

Answering a call

Answering an incoming call

1. The following screen will be displayed when you receive an incoming call.

2. To answer the incoming call, press the Accept button or the key on the steering wheel.

Rejecting an incoming

1. The following screen will be displayed when you receive an incoming call.

2. To reject the incoming call, press the Reject button or the key on the steering wheel. The incoming call will be rejected.

INFORMATION

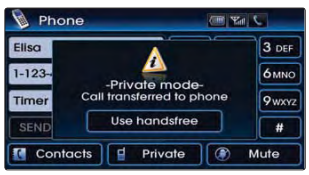
Upon receiving a call, the [Reject] function may not be supported in some mobile phones.

PART 6 BLUETOOTH HANDSFREE

Operating menus during a call

Switching call to the mobile phone

1. If you wish to switch the call to the mobile phone while talking on the car handsfree, press the Private button or press and hold (over 0.8 second) the key on the steering wheel.



2. As shown, the call will be switched to the mobile phone.

INFORMATION

If you wish to switch the call to the car handsfree while talking on the mobile phone, press the Use handsfree button or press and hold (over 0.8 second) the key on the steering wheel. The call will be switched to the car handsfree.

Activating Call waiting

1. If another person calls while already on a call, the following screen will be displayed.

2. Press the Accept button or the key on the steering wheel to receive the incoming call by switching to the new caller.

3. To switch again to the other caller, press the Switch button or the key on the steering wheel. The other call will be received and the previous call will switch back to call waiting.

INFORMATION

Press the End button or the key on the steering wheel to end the current call and call waiting.

Ending a call

1. To end a call, press the End button or the key on the steering wheel.

2. The call will be ended.

PART 6 BLUETOOTH HANDSFREE

Phone Book

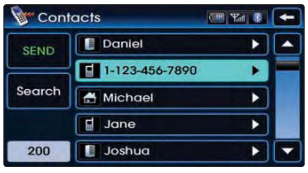
Making a call from the Phone book

1. Press the Contacts button on the PHONE screen.

2. The phone book list will be displayed.

INFORMATION

- The system may begin to slow down when downloading the phone book in some mobile phones.
- Upon connecting a mobile phone, the phone book lists saved in the mobile phone will automatically be downloaded. The phone book download function may not be supported in some mobile phones.



3. Select the number you wish to call from the phone book list and press the SEND button.

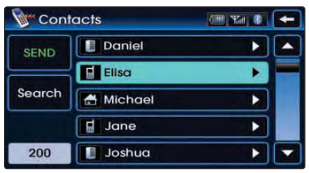
4. The call will be made to the selected number.

INFORMATION

- When there are more than 2 numbers saved in one phone number list, if the list is repeatedly selected, the registered phone numbers will be displayed sequentially on the list.
- The Mobile Phone/Office/Home categories received via the mobile phone may differ from the information actually stored in the mobile phone.
- Select the phone number you wish to connect by repeatedly selecting the phone number list and press the SEND button to make the call to the selected number.

Searching the Phone Book

1. Press the Contacts button on the PHONE screen.



2. Press the Search button on the Contacts screen.

3. Phone numbers can be searched by either Search by name or Search by number. From the two methods, select the search method you wish to use.

Searching by name

1. Press the Search by name button on the Phonebook search screen.

2. Input the name you wish to search and press the Done button.

3. The search results will be displayed on the screen.

PART 6 BLUETOOTH HANDSFREE

Searching by number

1.Press the Search by number button on the Phonebook search screen.

2. Input the phone number you wish to search and press the Done button.

3. The search results will be displayed on the screen.

Call History List

Making a call from Call history

1. Press the SEND button on the PHONE screen or press the key on the steering wheel.

2. The call history list will be displayed. Select the number you wish to call from the call history list and press the SEND button.

3. The call will be made to the selected number.

Sorting call history

1. The call history can be displayed by sorting the incoming calls, outgoing calls and missed calls.

2. When pressing the Dialed, Received, or Missed button, the corresponding call history list will be displayed.

PART 6 BLUETOOTH HANDSFREE

Dialed number

Missed number

Received number

INFORMATION

If there are no entries saved in the Dialed, Received, or Missed lists, the corresponding button will be inactive. Up to 20 entries can be saved in each list.

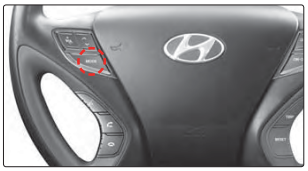
Phone Music

Before playing Phone music

Music saved in the mobile phone can be played in the car through Bluetooth audio streaming.
Phone music can be played only when a Bluetooth phone has been connected. To play phone music, connect the Bluetooth phone to the car system. For more information on connecting Bluetooth, please refer to the user's manual [Pairing and Connecting a Bluetooth phone].
If the Bluetooth is disconnected while playing phone music, the music will be discontinued.
The audio streaming function may not be supported in some mobile phones.
Only one function can be used at a time between the Bluetooth handsfree or Phone music function.

For example, if you convert to the Bluetooth handsfree while playing Phone music, the music will be discontinued.
Playing music from the car is not possible when there are no music files stored in the mobile phone.

Starting Phone Music



1. Repeatedly press the MEDIA key on the front panel or the MODE key on the steering wheel to enter Phone music mode.

PART 6 BLUETOOTH HANDSFREE

INFORMATION

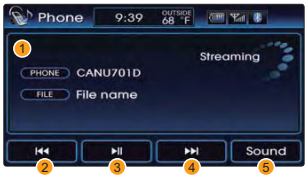
Each press of the MEDIA key on the front panel will change the function in the order of DISC → USB or iPod → AUX → Phone Music → DISC ...
Each press of the MODE key on the steering wheel will change the audio mode in the order of FM1 → FM2 → AM → XM1 → XM2 →XM3 → DISC → USB or iPod → AUX → Phone Music → FM1...
It is not possible to enter Phone music mode if the mobile phone is not connected or if the audio streaming setting within Bluetooth handsfree settings has been set to [Disable streaming audio].
For more information on audio streaming setting, please refer to the user's manual [Bluetooth settings > Setting Audio streaming].

2. The Phone music screen is displayed.

INFORMATION

While music saved in the mobile phone will automatically begin playing after converting to the Phone music screen, this music player function may not be supported in some mobile phones.
If music does not begin playing even after converting to the Phone music screen, try starting the music directly from the mobile phone.

Phone music screen layout



1. Information Bar : displays information for the currently playing song.
2. File Down button : plays the previous song.
3. Play/Pause button : plays/pauses the song.
4. File Up button : plays the next song.
5. Sound button : sets the FAD/BAL and BAS/MID/TRE.

Selecting Phone music files

1. Press the ⏮, ⏭ buttons on the Phone music screen or the VSEEK, TRACK∧ keys on the system.
   The previous or next song will be played each time the button or key is pressed.

INFORMATION

The file selection function may not be supported in some mobile phones.

PART 6 BLUETOOTH HANDSFREE

Bluetooth settings

Pairing and connecting a mobile phone

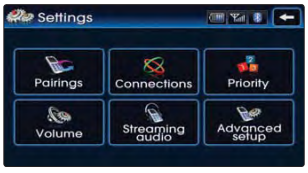
For more information on pairing and connecting a mobile phone, please refer to [Pairing and Connecting a Bluetooth phone].

Setting mobile phone auto connect priority

INFORMATION

After turning on the car ignition and the system is booted up, the Bluetooth connection between the car system and mobile phone is automatically made.
The Bluetooth connection will be conducted in the order of mobile phone priority.
The auto connect priority will be supported only for previously paired mobile phones.

1. Press the Settings button on the PHONE screen.



2. Press the Priority button on the Settings screen.

3. The paired mobile phone list and the mobile phone connection priority will be displayed.
   When wishing to change the priority order, select the mobile phone from the list and use the ▲, ▼ buttons to change its priority.
   Press the Done button to save the changed mobile phone priority.

Setting Handsfree volume

1. Press the Settings button on the PHONE screen.

2. Press the Volume button on the Settings screen.

INFORMATION

The Bluetooth handsfree volume can be adjusted only when a mobile phone has been connected.
The Volume cannot be set if no mobile phone has been connected.

Use the ◀, ▶ buttons to set the desired volume on the Phone volume screen. Press the Done button to save.

INFORMATION

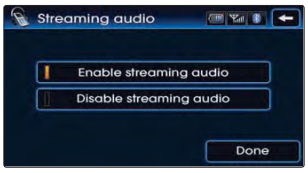
While on a call, turning the POWER knob to the left/right or pressing the ∧VOLV key on the steering wheel will also adjust the call volume.
If the call volume is set too high, the loud incoming call bell may cause a traffic accident.

PART 6 BLUETOOTH HANDSFREE

Setting Audio streaming

1. Press the Settings button on the PHONE screen.

2. Press the Streaming audio button on the Settings screen.



3. Streaming audio setting is selected.

INFORMATION

Enable streaming audio: repeatedly press the MEDIA key or the MODE key to enter Phone music mode. Phone music can be played through Bluetooth audio streaming.
Disable streaming audio: even if the MEDIA key or the MODE key is repeatedly pressed, will not enter Phone music mode. Phone music through Bluetooth audio streaming is not supported.

Advanced settings

Bluetooth advanced settings can be changed. Enter advanced settings through the following way.

1. Press the Settings button on the PHONE screen.

2. Press the Advanced setup button on the Settings screen.

INFORMATION

For safety reasons, operation of Advance setup is not possible when the vehicle is in motion. Please park in a safe place to make changes to Advanced setup.

3. The Advance setup screen will be displayed. In Advance setup, the following four settings can be made.

Searching and modifying my device properties

1. Press the Device information button on the Advance setup screen.

2. Displays the Device information such as the name and address of the car system.
To modify the device name, press the Change name button.

3. Use the key pad to input the Device name you wish to modify.

4. After inputting is complete, press the Done button to save.

PART 6 BLUETOOTH HANDSFREE

Changing passkey

1. Press the Change passkey button on the Advance setup screen.

2. Once the Change passkey screen is displayed, input the desired passkey and press the Done button.

INFORMATION

The passkey is a 4-digit authentication code used for a Bluetooth connection between the mobile phone and car system. The default passkey is set to 0000.

Deleting all paired phones

1. Press the Delete all paired phones button on the Advance setup screen.

2. A pop-up asking whether you wish to delete all paired phone will be displayed. Press the Yes button to delete all paired phones and the No button to cancel.

3. If Yes button is pressed, all currently paired phones will be deleted.

Initializing Bluetooth handsfree

1. Press the Restore factory settings button on the Advance setup screen.

2. A pop-up asking whether you wish to initialize the Bluetooth handsfree will be displayed.
   Press the Yes button to initialize the Bluetooth handsfree system and the No button to cancel.

INFORMATION

Upon initializing the Bluetooth handsfree, the entire paired phone list will be deleted and all Bluetooth related settings will be restored to factory state.

3. If Yes is pressed, the Bluetooth handsfree settings will be initialized.

PART 6 BLUETOOTH HANDSFREE

Important information

About pairing mobile phones

Q. I cannot search for mobile phones through the car system. What is the cause?

A. Check to see whether the mobile phone you wish to connect supports Bluetooth function. If your mobile phone supports Bluetooth, check to see that whether the Bluetooth settings in the mobile phone have been set to hidden state or if the Bluetooth power has been turned off. If the device has been set to hidden, release the hidden state and if the Bluetooth power has been turned off, turn the power ON and try searching again.

Q. What is the difference between pairing a mobile phone and connecting a mobile phone?

A. Through a two-way passkey between the car system and mobile phones, up to 5 mobile phones can be paired with the car system. The paired mobile phone will remain paired with the car system until the user deletes it manually.
In addition, the call history lists and phone number books saved in each mobile phone will also be maintained until the paired phone is deleted. For more information on pairing mobile phones, please refer to the manual [Pairing and Connecting a Bluetooth phone > Pairing a mobile phone].
Connect a mobile phone to Bluetooth by selecting the desired mobile phone from the paired phones. Within the car system, only one Bluetooth phone can be connected at one time. For more information, please refer to the manual [Pairing and Connecting a Bluetooth phone > Pairing a mobile phone].

Q. What is a Passkey?

A. A passkey is an authentication code used for two-way authentication of the car system and the mobile phone.
Only 4-digit numbers can be used as passkeys. Passkeys are registered only once when pairing the phone number for the first time. The factory-set passkey is 0000.

About making/answering phone calls

Q. How can I answer a call?

A. When you receive an incoming call, press the key on the steering wheel or the Accept button on the PHONE screen to answer. To reject the incoming call, press the key on the steering wheel or the Reject button on the PHONE screen.

Q. What should I do if I am talking on the Handsfree but wish to switch the call to the mobile phone?

A. To switch the call to the mobile phone, press the Private button on the PHONE screen or press and hold (over 0.8 second) the key on the steering wheel. If you wish to switch the call back to the car handsfree, press the Use handsfree button on the PHONE screen or press and hold (over 0.8 second) the key on the steering wheel.

About Bluetooth device environment

Q. What is the range for Bluetooth wireless connection?

A. The wireless connection range is within 10 meters.

Q. How many mobile phones can be paired?

A. It is possible to pair up to five phones with the car system.

Q. What is the reason why the call quality deteriorates?

A. First, check to see the signal strength of the mobile phone. The call quality may deteriorate when the signal strength is low. Call quality may also deteriorate if metal objects, such as drink cans, are placed near the mobile phone.

PART 6 BLUETOOTH HANDSFREE

CAUTION!

Mobile Phone Compatibility

Depending on the manufacturer, product and product specification, some mobile phones functions may not be supported or operate abnormally. Carefully read the cautions listed below.

- The occurrence of problems upon using mobile phones may be caused by the mobile phone and not by the AV/NAVI.
- Even mobile phones which support Bluetooth function may not operate properly if the mobile phone connection has been locked. Release the connection lock and try connecting the mobile phone with the system again.
- The Mobile phone battery icon and signal strength icon may not be properly displayed depending on the type of mobile phone.
- Call waiting is supported only when connected to mobile phones which support this feature. The call waiting pop-up may not be displayed in some mobile phones.
- Audio streaming mode will operate only when a Bluetooth phone has been connected. Connecting or disconnecting a Bluetooth phone while audio streaming is operating will stop music play.
- The audio streaming function may not be supported in some mobile phones.
- The phonebook may take a prolonged period of time to download or may not operate in some mobile phones.

The quality of Bluetooth handsfree calls may differ depending on the mobile phone.

PART 7
PGS (PARKING GUIDE SYSTEM)

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Operating sequence of the PGS 7-2

About PGS (Parking Guide System)

- PGS System is a safety system which provides monitored parking guidance.
- The PGS will operate automatically when the ignition KEY is turned ON and the transmission lever is set to R. The PGS will automatically stop operating when set to a different lever.
- The PGS (Parking Guide System) is an optional feature.

Operating sequence of the PGS

1. Position the ignition key onto ACC or ON.
2. Position the transmission lever to R.
3. The PGS mode will be displayed on the screen.

INFORMATION

Guidance track is as follows :
- Red line - 0.5m from the rear bumper
- Yellow line - 1.0m from the rear bumper
- Blue line - 3.0m from the rear bumper
- Red line - Track following left side driver side wheel
- Yellow line - Track following right side passenger side wheel

PART 8
APPENDIX

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PART 8 **APPENDIX**

Troubleshooting guide

Before thinking the product has malfunctioned

1. Errors which occur during the operation or installation of the device may be mistaken as a malfunction of the actual device.
2. If you are having problems with the device, try the suggestions listed below.
3. If the problems persist, contact your point of purchase or the nearest service center.

Problem	Function
There are small red, blue, or green dots on the screen	Because the LCD is manufactured with technology requiring high point density, a pixel deficiency or lighting may occur within 0.01% of total pixels.
The sound or image is not working	• Has the Switch for the vehicle been turned to [ACC] or [ON]? • Has the SYSTEM been turned OFF?
The video is being displayed but sound is not working	• Has the volume been set to a low level? • Has the volume been set on mute?
When the power is turned on, the corners of the screen are dark	• The display looking somewhat darker after prolonged periods of use is a normal phenomenon with LCD panels. It is not a malfunction. • If the screen is very dark, contact your point of purchase or the nearest service center.
Sound is working from only one speaker	Is the position of FAL/BAL sound controls or volume adjusted to only one side?
Sound and video does not work in AUX mode	Is the audio and video connector jacks fully inserted into the AUX terminal?
The external device is not working	Is the external device connected with a standard connector cable?
The road is missing	Some map data may be missing or incorrect.
The road name is spoken incorrectly	The TTS(Text To Speech) engine speaks the street name based off of the phonetic spelling. This will continuously be update with the map database.

Troubleshooting

Problem	Possible Cause	Solution
The power does not turn on.	The fuse is disconnected.	Replace with a suitable fuse. If the fuse is disconnected again, please contact your point of purchase or service center.
	Device is not properly connected.	Check to see that the device has been properly connected.
XM only goes through one category	The XM mode is in category.	Press the mode button to change to channel mode.
The CD does not play.	The DISC has not been inserted or has been inserted upside down.	Insert the disc properly so that the sides are facing the correct direction.
	The DISC has been contaminated.	Wipe dirt and other foreign substances from the DISC.
	The vehicle battery is low.	Charge the battery. If the problem persists, please contact your point of purchase or service center.
	A disc which is not supported by the device has been inserted.	Insert a disc which is supported for play by the device.
The video does not work.	The brightness level has been set to the lowest level.	Adjust the brightness to a higher level.
The sound does not work.	The volume level is set the lowest level.	Adjust the volume level.
	The connector is not properly connected.	Check the connection state.
	The device is currently fast-forwarding, rewinding, scanning, or playing in slow mode.	The sound will not work when the device is fast-forwarding, rewinding, scanning, or playing in slow mode.

PART 8 APPENDIX

Problem	Possible Cause	Solution
The sound or video quality is low.	The DISC is dirty or scratched.	Wipe off water or dirt from the DISC. Do not use a disc which has been scratched.
	Vibration is occurring from the position in which the conversion switch has been installed.	The sound may be short-circuited and the image distorted if the device begins to vibrate. The device will return to normal operation once the vibration has stopped.
	The color and tone quality of the image is low.	Aging of the video display and deterioration in performance may cause certain quality degradations.
The USB does not work.	USB memory is damaged.	Please use after formatting the USB into FAT 12/16/32 format.
	USB memory has been contaminated.	Remove any foreign substances on the contact surface of the USB memory and multimedia terminal.
	A separately purchased USB HUB is being used.	Directly connect the USB memory with the multimedia terminal on the vehicle.
	A USB extension cable is being used.	Use a standard USB Memory.
	A HDD type, CF, SD Memory is being used..	Use a standard USB Memory.
	There are no music files which can be played.	Only MP3,WMA file formats are supported. Please use only the supported music file formats.
The iPod is not recognized even though it has been connected.	There are no titles which can be played.	Use iTunes to download and save MP3 files into the iPod.
	The iPod firmware version has not been properly updated.	Use iTunes to update the firmware version and reconnect the iPod with the device.
	The iPod device does not recognize downloads.	Reset the iPod and reconnect with the device.

Map legend

Road color

Day Road Type	Color
Freeway	
Arterial	
County	
Collector	
Local	
Unpaved local	
Ferry	

Night Road Type	Color
Freeway	
Arterial	
County	
Collector	
Local	
Unpaved local	
Ferry	

POI icons

No	Category	Sub Category	Icon
1	Restaurants	Representation	
2		Fast Food	
3		American	
4		French	
5		Italian	
6		Continental	
7		Mexican	
8		Japanese	
9		Chinese	
10		Korean	
11		Vegetarian Food	
12		Seafood	
13		Latin American	
14		Asian	
15		African	

No	Category	Sub Category	Icon
16	Restaurants	Coffee Shop	
17		Others	
18	Automotive	Representation	
19		Gas Station	
20		Parking	
21		Auto service	
22		Road Assistance	
23		Hyundai Dealership	
24		Automobile Dealership	
25		Auto Parts	
26		Rest Area	
27		Car Wash	
28		Motorcycle Dealership	
29	Travel	Representation	
30		Airport	

PART 8 APPENDIX

POI icons

No	Category	Sub Category	Icon
31	Travel	Hotel	
32		Tourist Information	
33		Travel Agent	
34		Tourist Attraction	
35		Popular Spot	
36		Rental Car Agency	
37		Campground	
38		Ferry Terminal	
39		Bus Station	
40		Local Transit	
41		Train Station	
42		Representation	
43	Shopping	Department Store	
44		Convenience Store	
45		Shopping Center	

No	Category	Sub Category	Icon
46	Shopping	Music Store	
47		Grocery Store	
48		Bookstore	
49		Electronics	
50		Hardware Store	
51		Gifts	
52		Sporting Goods	
53		Home Specialty Store	
54		Clothing	
55		Shoe Store	
56	Recreation	Representation	
57		Amusement Park	
58		Museum	
59		Cinema	
60		Sports Activities	

No	Category	Sub Category	Icon
61	Recreation	Sports Complex	
62		Golf Course	
63		Winery	
64		Video & Game Rental	
65		Ski Resort	
66		Recreation Area	
67		Other Recreation	
68	Financial Service	Representation	
69		Bank	
70		ATM	
71		Check Cashing Service	
72		Money Transfer	
73		Business Facility	
74	Community	Representation	
75		Police Station	

POI icons

No	Category	Sub Category	Icon
76	Community	Post Office	
77		Library	
78		Court House	
79		Fire Department	
80		Convention Center	
81		City Hall	
82		Civic Center	
83		School	
84		Government Offices	
85		Waste & Sanitary	
86		Utilities	
87	Service	Representation	
88		Hospital	
89		Dentist	
90		Photography	

No	Category	Sub Category	Icon
91	Service	Tax Service	
92		Medical Service	
93		Attorney	
94		Funeral Director	
95		Hair & Beauty	
96		Cleaning & Laundry	
97		Social Service	
98		Physician	
99		Communication	
100		Tailor & Alteration	
101		Mudanzas	

Landmark icons

No	Category	Sub Category	Icon
1	Service	Airport	
2		Park	
3		Golf	
4		University	

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Microsoft® Windows® Automotive Operating System

Important Safety Information

Read and Follow Instructions

Before using your Windows Automotive-based system, read and follow all instructions and safety information provided in this end user manual ("User's Guide"). Not following precautions found in this User's Guide can lead to an accident or other serious consequences.

Keep User's Guide in Vehicle

When kept in the vehicle, the User's Guide will be a ready reference for you and other users unfamiliar with the Windows Automotive-based system. Please make certain that before using the system for the first time, all persons have access to the User's Guide and read its instructions and safety information carefully.

Warning:

Operating certain parts of this system while driving can distract your attention away from the road, and possibly cause an accident or other serious consequences. Do not change system settings or enter data non-verbally (using your hands) while driving. Stop the vehicle in a safe and legal manner before attempting these operations. This is important since while setting up or changing some functions you might be required to distract your attention away from the road and remove your hands from the wheel.

General Operation

Voice Command Control

Functions within the Windows Automotive-based system may be accomplished using only voice commands. Using voice commands while driving allows you to operate the system without removing your hands from the wheel.

MS

Prolonged Views of Screen

Do not access any function requiring a prolonged view of the screen while you are driving. Pull over in a safe and legal manner before attempting to access a function of the system requiring prolonged attention. Even occasional short scans to the screen may be hazardous if your attention has been diverted away from your driving task at a critical time.

Volume Setting

Do not raise the volume excessively. Keep the volume at a level where you can still hear outside traffic and emergency signals while driving. Driving while unable to hear these sounds could cause an accident.

Navigation Features

Any navigation features included in the system are intended to provide turn by turn instructions to get you to a desired destination. Please make certain all persons using this system carefully read and follow instructions and safety information fully.

Distraction Hazard

Any navigation features may require manual (non-verbal) setup. Attempting to perform such set-up or insert data while driving can seriously distract your attention and could cause an accident or other serious consequences. Stop the vehicle in a safe and legal manner before attempting these operations.

Let Your Judgment Prevail

Any navigation features are provided only as an aid. Make your driving decisions based on your observations of local conditions and existing traffic regulations. Any such feature is not a substitute for your personal judgment. Any route suggestions made by this system should never replace any local traffic regulations or your personal judgment or knowledge of safe driving practices.

Route Safety

Do not follow the route suggestions if doing so would result in an unsafe or illegal maneuver, if you would be placed in an unsafe situation, or if you would be directed into an area that you consider unsafe. The driver is ultimately responsible for the safe operation of the vehicle and therefore, must evaluate whether it is safe to follow the suggested directions.

Potential Map Inaccuracy

Maps used by this system may be inaccurate because of changes in roads, traffic controls or driving conditions. Always use good judgment and common sense when following the suggested routes.

Emergency Services

Do not rely on any navigation features included in the system to route you to emergency services. Ask local authorities or an emergency services operator for these locations. Not all emergency services such as police, fire stations, hospitals and clinics are likely to be contained in the map database for such navigation features.

Use of Speech Recognition Functions

Speech recognition software is inherently a statistical process which is subject to errors. It is your responsibility to monitor any speech recognition functions included in the system and address any errors.

MAP AS HOTLINE

M & SOFT AMERICA MAP CENTER
TEL : 888-757-0010
WEBSITE : www.mapnsoft.com

MEMO

MEMO

MEMO

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum 20 cm between the radiator and your body. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter unless authorized to do so by the FCC.

IC Warning

Operation of this device is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.