ENGLISH ESPAÑOL

Car Navigation System

OWNER'S MANUAL

TUCSON

Please read this manual carefully before operating your set and retain it for future reference. Designs and specifications are subject to change without prior notice.

The screens shown in this manual may differ from 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.



iPod®

iPod® is a registered trademark of Apple Inc.

Bluetooth®

The Bluetooth Wireless Technology word mark and logos are registered trademarks owned by Bluetooth Wireless Technology SIG, Inc.

DOLBY

Manufactured under license from Dolby Laboratories "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Cortex

Cortex is the name of the ARM Processor Architecture used in the AV System.

Windows Embedded Compact 7

Windows Embedded Compact 7 is an operating system used in the AV System.

Table of Contents

Precautions for safety	Selecting Presets	USB Video
Safety notes 6	Selecting Lists	Playing USB Video
	Saving Radio Frequency	Searching USB Video Files
Key Product Features	Saving Manually	Repeat
Key Product Features	Using Preset Menu·····15	Shuffle
	Scan	List
Component Names and Functions	Scanning Radio Frequency15	Caption 20
Head Unit	Scanning Preset frequency	Display settings
Steering Wheel	Sound settings	Sound settings
Using the System for the First Time	USB	USB Photo
Turning the System On/Off	About USB · · · · · 16	Viewing USB Photo21
Turning the System ON 12		Switching to menu screen or full screen 21
Turning the System Off	USB Music	Searching USB Image Files21
AV ON/OFF	Playing USB Music17	Rotating / Slide show
Resetting the System	Searching USB Music Files	Using the Menu Buttons
Home Screen	Repeat	Slideshow interval
	Shuffle 17	Display settings 22
FM/AM	Scan All17	
Basic Screen	Scan Folder·····17	iPod Music
Listening to FM/AM radio	Album Cover view	About iPod23
Auto tuning	List	Playing iPod Music24
Manual tuning14	Sound settings	Searching iPod Music Files24

Table of Contents

Using the Menu Buttons	What is Bluetooth®	Using the Menu Buttons
Setting audiobook playback speed 24	Wireless Technology?	Contacts
Sound settings	Precautions for Safe Driving	Updating Mobile Phone Contacts
	Cautions upon Connecting Bluetooth Phone 28	Making a call from contacts
AUX		Searching for contacts
Playing an AUX source	Bluetooth Connection	Calling list
Using the Menu Buttons	When no Phones Have Been Paired29	Viewing Calling lists
	Pairing from the Bluetooth® Device 29	Favourites
Bluetooth Audio	Pairing from the car	Calling Favourites
Before playing the Bluetooth audio	When a Phone is Already Paired30	Saving to Favourite
Playing Bluetooth audio	When your phone is connected30	Deleting Favourites
Searching Bluetooth audio Files		Changing the Favourites name 35
Using the Menu Buttons	Bluetooth Phone	Bluetooth settings
	Making/Answering Calls 31	
Getting started with navigation	Calling by Dialing a Number	Car Link
Precautions for safe driving	Making a Call from Speed Dial31	Before starting Car Link
What is GNSS?	Calling through Redial31	Installing the Car Link Application36
About satellite signals	Answering a Call	Starting mode
Acquiring satellite signals	Rejecting a Call31	Car Link Connection wizard
Initial navigation screen	Operating Menus during a Call	Using the Quick Menu
	Ending a Call	
Bluetooth® Wireless Technology	Switching Call to Bluetooth® Phone 32	Setup
Before Using the Bluetooth Handsfree 28	Making 3 way call	Starting mode

Table of Contents

Sound
Sound Balance
Variable EQ
Volume setting
Beep
Display39
Brightness
Dimming mode40
Bluetooth settings $\cdots \cdots 40$
Bluetooth connection
Ringtone
Change passkey
Changing device name
Auto Connection
System
Language
Keyboard42
Clock43
Factory settings
Specification
USB MP3 Specification

Before thinking	there	is a	product
defect			

Before thinking there is a product defect4		
Trouble shooting		
Trouble shooting · · · · · 46		

Limited Warranty

LIMITED VAVA DD A KITV	/	_
LIIVII EU WARRANI I	/4	۲

Precautions for safety

Safety notes



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user about the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



Always operate the vehicle in a safe manner. Do not become distracted by the vehicle while driving and always be fully aware of all driving conditions. Do not change settings or any functions. Pull over in a safe and legal manner before attempting such operations.

To promote safety, certain functions are disabled unless the hand brake is on.



To reduce the risk of electric shock, do not remove the cover or back of this product. There are no user-serviceable parts inside.

Refer servicing to qualified service personnel.



To reduce the risk of fire or electric shock, do not expose this product to dripping or splashing water, rain, or moisture.



When driving your vehicle, be sure to keep the volume of the unit low enough to allow you to hear sounds coming from the outside.



Do not drop it and avoid heavy impacts at anytime.



The driver should not watch the monitor while driving. If the driver watches the monitor while driving, it may lead to carelessness and cause an accident.

Precautions for safety

WARNING:

- Do not stare at the screen while driving. Staring at the screen for prolonged periods of time could lead to traffic accidents.
- Do not disassemble, assemble, or modify the navigation system. Such acts could result in accidents, fire, or electric shock.
- Using phone features while driving may distract drivers from paying attention to traffic conditions and result in traffic accidents.
 Use phone features only after the vehicle has been parked.
- Heed caution not to spill water or introduce foreign objects into the device. Such acts could lead to smoke, fire, or product malfunction.
- Please refrain from use if the screen is blank or no sound can be heard as these signs may indicate product malfunction. Continued use in such conditions could lead to accidents (fires, electric shock) or product malfunctions.

- Do not touch the antenna during thunder or lightening as such acts may lead to lightning induced electric shock.
- Do not stop or park in parking-restricted areas to operate the product. Such acts could lead to traffic accidents.
- The video screen will not operate when the vehicle is in motion. For your safety, first park the vehicle to watch or view the screen.
- Some Non-video features may also not operate when the vehicle is in motion. These features will operate only when the vehicle has been parked.

CAUTION:

- Do not keep the navigation system running with the engine stopped. Doing so may discharge the vehicle battery. When you use the navigation system, always keep the engine running.
- When the driver wants to operate the navigation system, first park the vehicle in a safe location and set the parking brake.
 - Operating the system while driving can distract the driver and may result in a serious accident.
- Do not disassemble or modify this system. If you do, it may result in accidents, fire, or electrical shock.
- Some states/provinces may have laws limiting the use of video screens while driving. Use the system only where it is legal to do so.
- Do not use your phone in private mode when you are driving. You must stop at a safe location to use it.

Key Product Features

Key Product Features

Button	Description
Display	Wide TFT-LCD Display Provides high quality video through a Wide TFT-LCD Display using an LED Back Light
Radio	Digital Tuner Feature Digital Tuner using PPL method that supports memory of 20 broadcast stations for each AM and FM modes. Radio broadcast station name Displays broadcast station names for key locations.
Multimedia Player	Support for various Media Formats Support for various media formats, including Radio, MP3, USB, iPod, AUX and Bluetooth® Audio Streaming modes
	Bluetooth® Wireless Technology Convenient use of Bluetooth® Handsfree by using buttons within the steering wheel remote controller
Miscellaneous	Digital Screen Control Features Easy control of features through touch screen options
	Steering Wheel Remote Controller Control over audio features, voice recognition and Bluetooth® through the steering wheel remote controller for maximum convenience

Component Names and Functions

Head Unit



Button	Description
1 POWER/ VOL Knob	 Power on When power is off, press to turn power on Power off When power is on, press and hold to turn power off Audio off When power is on, press to turn Audio off Turn left/right to control volume
2 HOME	Press to move to the home menu screen.
3 C	Takes user to phone screen
4 MEDIA	 Operates available media (USB, iPod, Bluetooth Audio, AUX) If the media is not connected, corresponding modes will be disabled
5 V SEEK TRACK ^	When the SEEK , TRACK A keys are pressed shortly In FM/AM mode, searches broadcast frequencies In Media modes, changes the track, file or chapter When the SEEK , TRACK A keys are pressed and held FM/AM mode: automatically searches broadcast frequencies and channels. Once released, searches and begins playing the next broadcast frequency Media mode: rewinds or fast forwards the track or file (except Bluetooth Audio)
6 Reset	Resets the system

Component Names and Functions

Head Unit



Name	Description
7 FM/AM	 Operates FM/AM mode Each time the key is pressed, mode is changed in order of FM ▶ AM ▶ FM.
8 MAP	Press to display the map screen of the current location when in a different mode
9 NAV	Press to move to the navigation menu screen
10 (Turns off the screen
11 🕸	Displays the Setup mode
12 TUNE / ENTER knob	 FM/AM mode: changes the frequency Media mode: changes the track, file or title (except AUX)

Component Names and Functions

Steering Wheel



Button	Description
1 + VOL -	Controls the volume
2 ^	When keys are pressed shortly. FM/AM mode: plays previous/next preset channel if it is saved. Media mode: changes the track, file or chapter When keys are pressed and held. In FM/AM mode: changes frequencies while pressed. Upon release, scans and receives the next frequency Media mode: rewinds or fast forwards the track or file

_	
Button	Description
3	Mutes the sound
4 0	 Operates AM ► FM ► Available Media (USB Music/USB Video/iPod/Bluetooth Audio/AUX) If the media is not connected, corresponding modes will be disabled. Press and hold the key to turn the Audio system on/off When power is off, press the key to turn power back on
5 6	When pressed in the phone screen, displays the last call When pressed in the dial screen, makes a call When pressed in the incoming call screen, answers the call When pressed during single call, switches call back to mobile phone (Private). When pressed during 3way call, swap call When pressed twice, redials the last call When pressed and held When pressed during a Bluetooth® Handsfree call, switches call back to mobile phone (Private) When pressed while calling on the mobile phone, switches call back to Bluetooth® Handsfree (Operates only when Bluetooth® Handsfree is connected) When pressed, redials the last call
6	When pressed during a call, ends the phone callWhen pressed in the incoming call screen, rejects the call

Using the System for the First Time

Turning the System On/Off

Turning the System ON

Press the engine start button. If the brakes are not pressed, then the ACC and system will turn on. If the brakes are pressed, then the IGN and system will turn on and the ignition will start. In both instances, the following safety warning will be displayed.





Pressing the PWR key on the head unit will display the safety warning page.

Press the Agree button to display the most recent mode.

Turning the System Off

Press the engine start button again or press and hold the power key on the head unit to turn the system off.

NOTE

 If the system is turned off while the Handsfree is being used, then the call will automatically switch back to the mobile phone.

AV ON/OFF

Press the PWR key on the head unit when the AV is on. Press the PWR key or press the menu key to turn on AV.

While AV is turned off, the V SEEK , TRACK ^ key and the TUNE / ENTER knob will be disabled.

Resetting the System

This feature is used to reset the system in the occurrence of an unforeseen error or problem.



Press and hold the RESET key for about 1 second. (The use of a clip or pin is recommended when resetting the system.)

Home Screen

Press the HOME key ▶ Press the menu icon you want to use.



FM/AM

Basic Screen





Button	Description
1 Mode tab	Press the tab to change between FM and AM mode
2 Preset button	Displays the Preset List
3 LIST button	Displays automatically updated lists
4 MENU button	Displays List, Preset, Scan, Preset scan and Sound settings menus
5 Back button	Moves to the previous screen
6 Frequency	Displays the current frequency
7 Preset No.	Displays the current preset number
8 Seek down	Single tap: seek down Long tap: fast seek down
9 Tune down	Single tap: tune down Long tap: tune down until the button is released and plays the current frequency
10 Tune up	Single tap: tune up Long tap: tune up until the button is released and plays the current frequency
11 Seek up	Single tap: seek up Long tap: fast seek up
12 Frequency bar	Use the tap to move to the desired frequency
13 List	Displays automatically updated lists
14 Preset	Displays saved presets for user selection
15 Scan	Plays frequencies with superior reception for 3 seconds each
16 Preset Scan	Plays frequencies saved to presets for 3 seconds and moves to the next saved frequency
17 Sound settings	Sets sound related settings

FM/AM

Listening to FM/AM radio

Press the FM/AM key to change the mode in order of FM ▶ AM ▶ FM.

Or Press the HOME key ▶ Press the Badio button ▶ Press FM or AM tab.



Auto tuning

Press the SEEK , TRACK ^ key or press the Wall button to automatically search for frequencies.

Manual tuning

Press the TUNE / ENTER knob or press the substitution to manually select the frequency. The stations move up and down step by step. Press or drag the frequency bar to search for frequencies that you want.

Selecting Presets

Press the MENU button ▶ Press the Preset button. From the presets, select the frequency you want to listen to.



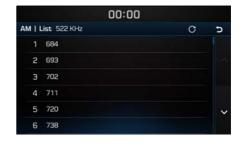
Selecting Lists

Press the MENU button ▶ Press the List button.

From the lists, select the frequency you want to listen to.

FM lists are automatically updated.

AM lists are manually updated by pressing ().



FM/AM

Saving Radio Frequency

Saving Manually

After selecting frequency ▶ Press the button ▶ Press the + Add to Preset.



Using Preset Menu

Press and hold the preset list you want to edit.



Button	Description
1 Tune	listens to frequency selected
2 Save	overwrites frequency listening to currently
3 Delete	deletes frequency





Scan

Scanning Radio Frequency

Press the MENU button ▶ Press the Scan



Starting from the current frequency, frequencies with superior reception are scanned for 3 seconds and the previous frequency is restored.

Scanning Preset frequency

Press the MENU button ▶ Press the Preset Scan .

Plays frequencies saved to presets for 3 seconds and moves to the next saved frequency

NOTE

 When the scan is operating, pressing the controller will stop the function and return to the stopped station.

Sound settings

Press the MENU button ▶ Press the Sound settings .

For details, refer to the "Sound" on the page 38.

USB

About USB

Connect the USB device after turning on the engine. The USB device may become damaged if it is already connected when the ignition is turned on.

- Files that are not standard format files will not be played.
- For MP3/WMA files, only music files with compression rates between 8 Kbps ~ 320 Kbps can be played.
- Heed caution to static electricity when connecting/disconnecting external USB devices.
- Encoded MP3 Players will not be recognized when connected as an external device.
- When connecting an external USB device, the device may not properly recognize the USB is in some states
- Only USB devices formatted as FAT 12/16/32 are supported, and NTFS file system is not supported.
- Some USB devices may not be supported due to compatibility issues.
- Avoid contact between the USB connector with bodily parts/foreign objects.

- Repeated connecting/disconnecting of USB devices within short periods of time may result in product malfunction.
- Insert USB device after starting the car. If the car is started while USB device is inserted, it may damage USB device.
- 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 required time are not indications of malfunction.
- The device may not recognize the USB device if separately purchased USB hubs and extension cables are being used. Connect the USB directly with the multimedia terminal of the vehicle.
- When application programs are installed to specific USBs, files may not properly play.
- The device may not operate normally if MP3
 Players, cellular phones, digital cameras, or
 other electronic devices (USB devices not rec ognized as portable disk drives) are connected
 with the device.
- Charging through the USB may not work for some mobile devices.

- The device may not support normal operation when using a USB memory type besides Metal Cover Type USB Memory.
- The device may not support normal operation when using formats such as HDD Type, CF, or SD Memory.
- The device will not support files locked by DRM (Digital Rights Management).
- USB memory sticks used by connecting an Adaptor (SD Type or CF Type) may not be properly recognized.

USB Music

Playing USB Music

Once a USB is connected, USB Music mode will operate automatically.

Press the HOME key ▶ Press the Media button ▶ Press the USB Music button ▶ Press the Play button to play USB music.





NOTE

 If the USB is not connected, or there is no media file in USB then the USB media button will be disabled.

Searching USB Music Files

While playing Press the SEEK, TRACK A
key or the SEEK button to play the previous/next file.

- Pressing and holding the SEEK, TRACK A
 key or the See See See See TRACK A
 button will rewind or fast forward the current file.
- While the SEEK, TRACK key or the button is being pressed, the track will rewind or fast-forward at high speeds.

 Once the key is released, the USB Music will begin playing at normal speed.

NOTE

 Press the TUNE / ENTER knob allows you to select the previous/next file. This key will not rewind or fast-forward the file.

Repeat

Press the S button.

Each time the button is pressed, the option is changed from Repeat Folder(②) ▶ Repeat One(②) ▶ Off(Repeat All(②)).

Shuffle

Press the abutton.

Each time the button is pressed, the option is changed from Shuffle All(\nearrow) \triangleright Shuffle Folder (\nearrow) \triangleright Off(\nearrow).

Scan All

Press the MENU button ▶ Press the Options
▶ Press the Scan All to scan files within the USB in random order

Scan Folder

Press the MENU button ▶ Press the Options ▶
Press the Scan Folder to search files within the current folder

USB Music

Album Cover view

Press the button ▶ Press the ✓ > button to search desired album.



List

Press the MENU button ▶ Press the List button to display USB Music list screen.



It is possible to search by Folder, Song, Album and Artist.

Sound settings

Press the MENU button ▶ Press the Options

▶ Press the Sound settings .

For details, refer to the "Sound" on the page 38.

USB Video

Playing USB Video

Once a USB is connected, USB Video mode will operate automatically.

Press the HOME key ▶ Press the Media button ▶ Press the USB Video button ▶ Press the Play button to play USB Video.





NOTE

 If the USB is not connected, or there is no media file in USB then the USB media button will be disabled.

Searching USB Video Files

While playing ▶ Press the ▼ SEEK , TRACK ∧ key or TRACK ∧ button to play the previous/ next file.

- Pressing and holding the SEEK, TRACK A
 key or
 le
 button will rewind or fast forward the current file.
- While the **Y SEEK**, **TRACK** key or **I** button is being pressed, the track will rewind or fast-forward at high speeds. Once the key is released, the USB Video will begin playing at normal speed.

NOTE

 Press the TUNE / ENTER knob allows you to select the previous/next file. This key will not rewind or fastforward the file.

Repeat

Press the S button.

Each time the button is pressed, the option is changed from Repeat Folder(②) ▶ Repeat One(②) ▶ Off(Repeat All(②).

Shuffle

Press the abutton.

Each time the button is pressed, the option is changed from Shuffle All(\nearrow) \blacktriangleright Shuffle Folder (\nearrow) \blacktriangleright Off(\nearrow).

USB Video

List

Press the MENU button ▶ Press the List button to display USB Video list screen.



It is possible to search by Folder and Videos.

Caption

Press the MENU button ▶ Press the Caption button to display caption on USB Video screen.



Display settings

Press the MENU button

Press the Display settings



Press the Reset button to initialize the settings.

Press the button to set "Brightness" and "Dimming mode".

For details, refer to the "Display" on the page 39.

Sound settings

Press the MENU button

➤ Press the Sound settings

For details, refer to the "Sound" on the page 38.

NOTE

USB Video is not available while driving.
(Because of traffic regulations, videos is only available when your vehicle is parked.)

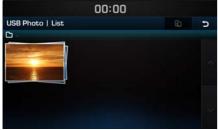


USB Photo

Viewing USB Photo

Press the HOME key ▶ Press the Media button ▶ Press the USB Photo button ▶ Press the desired photo in List screen.





NOTE

 If the USB is not connected, or there is no media file in USB then the USB media button will be disabled.

Switching to menu screen or full screen

Press the photo to view with full screen.

Press the photo once more to return to the menu screen.





NOTE

- In full screen, images can be zoomed in/out by up to 300%
- Press > to move to the List screen.

Searching USB Image Files

Press to view the list of USB photos.

Rotating / Slide show

Press the buttons to rotate image.

Press the button to view slide show.



NOTE

• Press **5** to move to the previous screen.

USB Photo

Using the Menu Buttons

Press the MENU button to set Slide show, Slide time and Display settings menus.



Slideshow interval

Press the MENU button ▶ Press the Slide time button.



Slide show intervals can be set at 5 sec 10 sec , 20 sec , or 30 sec intervals.

NOTE

 Slideshow is not available while driving. (Because of traffic regulations, image is only available when your vehicle is parked.)



Display settings

Press the MENU button ▶ Press the Display settings button.

For details, refer to the "Display" on the page 39.

iPod Music

About iPod

iPod® is a registered trademark of Apple Inc.

- Some iPods with unsupported communication protocols may not properly operate with the system.
- If the iPod malfunctions due to an iPod device defect, reset the iPod and try again. (To learn more, refer to your iPod manual.)
- During ACC ON state, connecting the iPod through the iPod cable (The cable that is supplied when purchasing iPod/iPhone product.) will charge the iPod through the system.
- The use of genuine iPod cables supplied by Apple is recommended. (The use of other products may result in noise or abnormal operation.)
- Within iPhones, streaming audio and iPod control may occasionally conflict. If problems persist, remove the iPhone and connect again.
- Use iPod with complete synchronization to iTunes. Unauthorized song addition may cause abnormal operation.
- If iPod and Bluetooth are connected simultaneously with the same iPhone, you cannot use Bluetooth audio function.
- If iPod touch or iPhone is used, iOS4.2 or a later version is recommended.

iPod Music

Playing iPod Music

Once a iPod is connected, iPod Music mode will operate automatically.





- Press the button to play files saved within the iPod device.
- Press the u button to pause the file.

NOTE

 If the iPod is not connected, or there is no media file in iPod then the iPod Music button will be disabled.

Searching iPod Music Files

You can play the previous or next file. For details, refer to the page 17.

Using the Menu Buttons

Press the MENU button to set List and options menus.



For details, refer to the "List" on the page 18.

Setting audiobook playback speed

Setting the playback speed only affects audio books purchased from the iTunes store or audible.com.

For details about iPod, refer to the iPod User Guide.

Press the MENU button ▶ Press the options ▶
Press the Audiobook .



Sound settings



For details, refer to the "Sound" on the page 38.

AUX

Playing an AUX source

If an external device connector is connected with the AUX terminal, then AUX mode will automatically operate.

Press the HOME key ▶ Press the Media button ▶ Press the AUX button to play auxiliary device while a different source is playing.





NOTE

- Video can be played with video connectors.
- Video is not available while driving. (Because of traffic regulations, Aux Video is only available when your vehicle is parked.)



Using the Menu Buttons

Press the MENU button to set Sound or Display.





For details, refer to the "Sound" on the page 38 and "Display" on the page 39.

Bluetooth Audio

Before playing the Bluetooth audio

- Music saved in the mobile phone can be played in the car through Bluetooth audio streaming.
- Bluetooth audio can be played only when a Bluetooth phone or Bluetooth audio device has been connected. To play Bluetooth audio, connect the Bluetooth phone to the car system.
 For more information on connecting Bluetooth, please refer to the user's manual Bluetooth Connection on page 29.
- If Bluetooth is disconnected while playing Bluetooth audio, the audio stream will be interrupted.
- The audio streaming function may not be supported in some mobile phones. Only one function can be used at a time, either the Bluetooth handsfree or the Bluetooth audio function. For example, if you convert to the Bluetooth handsfree while playing Bluetooth audio, the music stream is interrupted.
- Playing music from the car is not possible when there are no music files saved in the mobile phone.

Playing Bluetooth audio





- Press the button to play files saved within the Bluetooth phone.
- Press the U button to pause the file.

Searching Bluetooth audio Files

You can play the previous or next file. For details, refer to the page 17.

NOTE

- The title/artist info may not be supported in some mobile phones. When it is not supported, only the symbol will be displayed.
- The play/pause feature may operate differently depending on the mobile phone.

Using the Menu Buttons

Press the MENU button to set Sound settings menus.



For details, refer to the "Sound" on the page 38.

Getting started with navigation

Precautions for safe driving

Please observe and comply with local traffic rules and regulations.

- For your safety, some features cannot be operated while driving. Features that cannot be operated will be disabled.
- The route displayed for destination guidance is a reference and the route guidance will take you to the vicinity of your destination. The highlighted route is not always the shortest distance, the least congested, and in some cases might, not be the fastest route.
- Road, name, and POI information may not always been completely updated. It might happen that road names and POI information is not up to date.
- The car position mark does not always indicate your exact location. This system uses GNSS information, various sensors, and road map data to display the current position. However, errors in displaying your location may occur if the satellite is transmitting inaccurate signals or two or less satellite signals can be received. Errors that occur in such conditions cannot be corrected.
- The position of the vehicle within the navigation may differ from your actual location depending on various reasons, including the satellite trans-

mission state, vehicle state (driving location and conditions), etc. Additionally, the car position mark may differ from the actual position if the map data is different from the actual road land-scape, such as changes due to the construction of new roads. If such differences occur, driving for a short period of time will automatically correct the position of the vehicle through map matching or GNSS information.

What is GNSS?

The GNSS(Global Navigation Satellite System) is a satellite-based navigation system made up of a network of 32 satellites placed into orbit by the Global Positioning System (GPS) of U.S.A, GLONASS of RUSSIA, etc.

GNSS works in any weather conditions, anywhere in the world, 24 hours a day.

There are no subscription fees or setup charges to use GNSS.

About satellite signals

Your unit must acquire satellite signals to operate. If you are indoors, near tall buildings or trees or in a parking garage, the unit cannot acquire satellite signals.

Acquiring satellite signals

Before the unit can determine your current position and navigate a route, you must do the following steps:

- 1. Go outside to an area free from tall obstructions.
- 2. Turn on the unit.

Acquiring satellite signals can take a few minutes.

Initial navigation screen

When you enter a navigation mode for the first time, the caution screen is displayed on the screen. Read the caution carefully and then press [Agree].

- If you want to change the system language, press [Language]. For details refer to page 42("Language").
- If there is no operation for 10 seconds in the caution screen the system automatically switches to the navigation screen.

Bluetooth® Wireless Technology

Before Using the Bluetooth Handsfree

What is Bluetooth® Wireless Technology?

- Bluetooth * Wireless Technology refers to a short-distance wireless networking technology which uses a 2.45GHz frequency to connect various devices within a certain distance.
- Supported within PCs, external devices, Bluetooth® phones, PDAs, various electronic devices, and automotive environments, Bluetooth ® Wireless Technology to be transmitted at high speeds without having to use a connector cable.
- Bluetooth® Handsfree refers to a device which allows the user to conveniently make phone calls with Bluetooth® mobile phones through the Multimedia system.
- The Bluetooth® Handsfree feature may not be supported in some mobile phones.

Precautions for Safe Driving

- Bluetooth® Handsfree is a feature that enables drivers to practice safe driving. Connecting the head unit with a Bluetooth® phone allows the user to conveniently make calls, receive calls, and manage the phone book. Before using Bluetooth® Wireless Technology, carefully read the contents of this user's manual.
- Excessive use or operations while driving may lead to negligent driving practices and be the cause of accidents. Do not operate the device excessively while driving.
- Viewing the screen for prolonged periods of time is dangerous and may lead to accidents.
 When driving, view the screen only for short periods of time.

Cautions upon Connecting Bluetooth Phone

- Before connecting the head unit with the mobile phone, check to see that the mobile phone supports Bluetooth® features.
- If you do not want automatic connection with your Bluetooth® device, turn the Bluetooth® feature off of the Bluetooth® device.
- Park the vehicle when connecting the head unit with the mobile phone.
- Some Bluetooth features may occasionally not operate properly depending on the firmware version of your mobile phone. If such features can be operated after receiving a S/W upgrade from your mobile phone manufacturer, unpair all devices and pair again before use.

Bluetooth Connection

When no Phones Have Been Paired

Press the key on the steering wheel or press the key Press the ok.



Pairing from the Bluetooth® Device

Press the MENU button ▶ Press the Search from device .





From the Bluetooth® device, search for the car name and pair the device. When searching from the Bluetooth® device, the car name is TUCSON and the default passkey is '0000'.

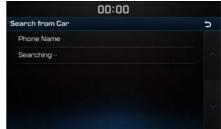
Pairing from the car

Press the MENU button ▶ Press the

Search from car ▶ Press the phone name to

pair ▶ Press the YES .





Bluetooth Connection

When a Phone is Already Paired





NOTE

 When a Bluetooth device is connected, a new device cannot be paired. If you want to pair a new phone, first disconnect the connected Bluetooth device.

When your phone is connected

Press the key on the steering wheel or press the key on the head unit to display the following screen.



NOTE

- Once Bluetooth connection is successful, the name of the connected mobile phone will be displayed on the phone screen and Bluetooth handsfree functions will be ready to be operated.
- Some functions may not be supported due to limited Bluetooth compatibility between the car system and mobile phone.

Making/Answering Calls

Calling by Dialing a Number

Enter number on the Dial Pad ▶ Press the button or the key on the steering wheel.



NOTE

- If you press the wrong number, press to delete one digit of the entered number. Press and hold the dial pad 0 "+" to enter a "+".
- Press the button to search phone numbers.
 For detail, refer to the "Searching for contacts" on the page 33.

Making a Call from Speed Dial

Enter the 1 or 2 digit speed dial number with the Dial Pad ▶ Press and hold the last number.

Calling through Redial

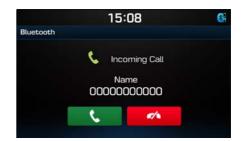
Press and hold the button or Press the key on the steering wheel twice.

NOTE

• Redialing is not possible when there is no dialed calls list.

Answering a Call

Incoming call notice Press the button or the key on the steering wheel.



Rejecting a Call

Incoming call notice Press the button or the key on the steering wheel.

Operating Menus during a Call



Button	Description
1	Ends a call.
2 💆	Turns the Mic On/Off.
3 6	Switches a voice call from the car handsfree to the mobile phone.
4	Display dial pad screen for entering ARS numbers.
5	3 Way call

Ending a Call

While on a call ▶ Press the button or the key on the steering wheel.

Switching Call to Bluetooth® Phone

During handsfree call ▶ Press the ton or press and hold the key on the steering wheel



Making 3 way call

While on a call ➤ Press the button. ➤ Press phone number you want to make a call ➤ Press the button.

Using the Menu Buttons

In Phone screen ▶ Press the MENU button to use Contacts , Calling list , Favorites , Bluetooth settings .



Contacts

Updating Mobile Phone Contacts

Up to 5,000 mobile phone contacts can be updated.



The contacts are deleted and the contacts of the connected phone is updated.

Making a call from contacts

In Contacts screen ▶ Press the MENU button ▶ Press the Contacts button ▶ Press the contact you want to call.



Searching for contacts





Calling list

Viewing Calling lists

In Phone screen Press the MENU button Press the Calling lists .



Press the MENU button on Calling list screen.

Button	Description
1 All	Displays all calling list.
2 Missed	Displays the missed calling list.
3 Received	Displays the incoming calling list.
4 Dialed	Displays the outgoing calling list.

NOTE

• The calling list may not be saved in some mobile phones.

Favourites

Calling Favourites

In Phone screen ▶ Press the MENU button ▶
Press the Favourites ▶ Press the Favourite you want to call.



Saving to Favourite

In Phone screen ▶ Press the Add to favourites button.



In Contacts screen or Calling list screen
Press and hold the contact you want to save
Press the Save to Favourites.





Deleting Favourites

In Favourites screen Press the MENU button Press the Delete all Press the OK.



In Favourites screen > Press and hold the favourite you want to delete > Press the Delete > Press the DK .



Changing the Favourites name

In Favourites screen ▶ Press and hold the favourite you want to change ▶ Press the Rename ▶ Enter the name ▶ Press the OK.



Bluetooth settings

In Phone screen ▶ Press the MENU button ▶
Press the Bluetooth settings .



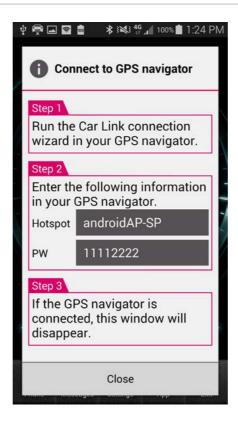
For details, refer to the "Bluetooth" on the page 40.

Car Link

Before starting Car Link

Installing the Car Link Application

- Install the Car Link application into your mobile phone.
- Car Link application automatically turns on Wi-Fi Hotspot of Your mobile phone by pressing [Connection with navigation] button on connection setting screen of application.
- Following screen is displayed when Car Link is ready to connect.
- It is not possible to use Car Link feature and Bluetooth Audio at the same time. Bluetooth connection will be disconnected, when Car Link is connected
- iPhone is not supported.
- For details, visit the Car Link website (http://www.car-link.co.kr/motrex).



Starting mode







Car Link

Car Link Connection wizard

Car Link Connection wizard will start automatically and search Wi-Fi hotspots.



Press the Hotspot name.



Enter the Password ▶ Press the OK .



When your phone is successfully connected, the Phone screen is displayed on the screen of device.

You can use the Car Link features by adjusting both your mobile phone and the device.

Using the Quick Menu

Press the screen to display the Quick Menu of the device on the left on the screen.



Description
Activates the Quick menu with on/ off button.
Moves to the home screen of your smart phone.
Moves to the previous screen.
Displays the HOME screen of the device (HOME key)
Displays the options window.

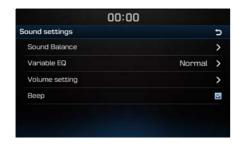
Starting mode

Press the key to display the Setup screen.



Sound

This menu is used to adjust the sound effects for the whole system.



Sound Balance

In Sound settings screen ▶ Press the

Sound Balance ▶ Set the desired sound balance.



Use the ▲, ▼, , , and ⇔ buttons to adjust settings.

Press the Reset to restore sound to the center position.

Variable EQ

In Sound settings screen ▶ Press the



Volume setting

In Sound settings screen ▶ Press the





Button	Description
1 Phone	Controls the volume related to phone.
2 Start up	Controls the audio volume when starting the system.

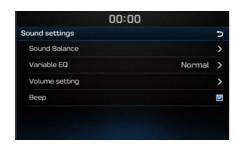
Use the \triangle , ∇ and \bigcirc buttons to adjust settings.

Press the Reset to initialize the settings.

Beep

This menu allows you to play a beep sound whenever you operate the touch screen.

In Sound settings screen ▶ Press the Beep to turn on/off.



Display

This menu allows you to adjust the brightness and set the dimming mode for the whole system.

Press the ₩ key ▶ Press the Display .



Brightness

In Display settings screen ▶ Press the

Brightness ▶ Set the desired brightness.



Use the lacktriangle , \lacktriangle and \lacktriangle buttons to adjust settings.

Press the Reset to initialize the settings.

Dimming mode

This menu allows you to set the brightness according to mode changes.

In Display settings screen ▶ Press the

Dimming mode ▶ Set the desired mode.



Button	Description
1 Auto	Adjusts the brightness automatically according to surrounding brightness.
2 Day	Brightness level always set on high.
3 Night	Brightness level always set on low.

Bluetooth settings



Bluetooth connection

This menu allow you to manage the Bluetooth device list, such as pairing, connecting or deleting Bluetooth devices.

In Bluetooth settings screen ▶ Press the

Bluetooth connection ▶ Set the desired settings.





Press and hold the phone name to disconnect/delete the device

Ringtone

The configured ringtone is played through the vehicle speakers when you receive a call.

In Bluetooth settings screen ▶ Press the Ringtone ▶ Set the desired ringtone.



Change passkey

This feature allows you to change the passkey used for Bluetooth device authentication.

In Bluetooth settings screen ▶ Press the

Change passkey ▶ Enter the passkey.



NOTE

• The default passkey is 0000.

Changing device name

In Bluetooth settings screen ▶ Press the

Change device name ▶ Enter the name.



NOTE

• The default device name is TUCSON.

Auto Connection

The Bluetooth® device will automatically be connected according to the option set when the car ignition is turned on.

In Bluetooth settings screen ▶ Press the

Auto Connection to turn on/off.



System

Press the ∰ key ▶ Press the System button.

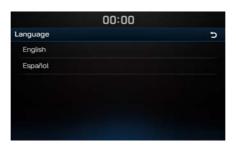


Language

This menu allows you to set the language of the system.

In System settings screen ▶ Press the

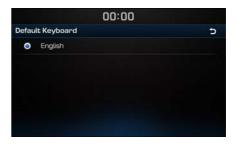
Language Press the desired language.



Keyboard

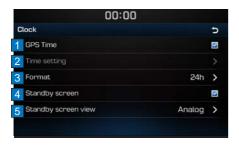
This option allows you to change the type of keyboard used within the system.

In System settings screen Press the Reyboard Press the desired language.



Clock

In System settings screen ▶ Press the Clock ▶ Set the desired settings.



Button	Description	
1 GPS Time	Displays time according to the received GPS time.	
2 Time set- ting	Sets the current time.	
3 Format	Converts the digital clock display to 12 or 24 hours.	
4 Standby screen	Turns on/off the screen displayed when the system power is turned off.	
5 Standby screen view	Sets the type of Standby screen.	

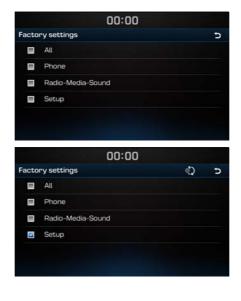
Factory settings

This menu allows you to reset settings specified by the user.

In System settings screen ▶ Press the

Factory settings ▶ Press the desired item ▶

Press the ♠ Press the ▼ES .



Specification

USB MP3 Specification

Category	Description
MP3 File Specification	Response Specification: MPEG1 AUDIO LAYER3
Recommended Bitrate and	Response Sampling Frequency : 32, 44.1, 48 (KHz)
Sampling Frequency	Response Bitrate: 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 (Kbps)
ID3 TAG	ID3 v1.1 and ID3 v2.x TAG
Detailed Specification	 Max Directory Layers: 15 layers Max length of folder names and file names: 255Bytes Characters supported for folder/file names: English, Español and numbers Max number of files recognized from one USB device: 5000

Video and Image Specification

Category	Description	
File Format	AVI(DivX), MPEG	
Image Format	jpg, gif, bmp, png	
Extensions	avi, divx, mpg, mpeg, mp4, wmv	
Supported Image Resolution	Max 4000x3000	
Supported Image File Size	Max 4 Mbytes	
Supported image zoom in/out	Max 300%	
Video Codec	H.263, MPEG 1/2, MPEG4-ASP, MPEG4- AVC(H.264), VC-1, AVS, VP8	
Video Resolution	1920 x 1080 (WMV 9: Max 8Mbps, 1280x720, WMV 8: 640x480)	
Audio Codec	MP3, OGG, WMA	
Subtitles	SMI	
Unsupported files	 Files not compatible with supported specifications Modified files (files with modified file formats) Transformed files (example: AVI files encoded with WMV video codec) Files without indexes 	

Before thinking there is a product defect

The current car position as shown on the navigation may differ from the actual position under the following conditions.

- When driving on Y-shaped roads with narrow angles, the current position may be displayed in the opposite direction.
- Within city streets, the current position may be displayed on the opposite side or on an off-road position.
- When changing the zoom level from maximum to a different level, the current position may become displayed on a different road
- If the vehicle is loaded onto a ferry or a car transport vehicle, the current position may become stalled on the last position prior to loading.
- When entering a road after passing an underground parking structure, building parking structure or roads with many rotations.
- When driving in heavy traffic with frequent starts and stops.
- When driving under slippery conditions, such as heavy sand, snow, etc..
- · When the tires have recently been replaced

- (Especially upon use of spare or studless tires).
- · When using tires of improper size.
- When the tire pressure for the 4 tires are different.
- When the replacement tire is worn or used (Especially studless tires having passed a second season).
- · When driving near high-rise buildings.
- When a roof carrier has been installed.
- When a long distance route is calculated while driving on an expressway, in such cases, continued driving will automatically enable the system to conduct map matching or use updated GNSS information to provide the current position (In such cases, up to several minutes may be required).

Correct route guidance may not occur due to search conditions or driving position. The following occurrences are not malfunctions:

- 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 quidance may not occur.
- A route guidance signaling for a u-turn may occur in some No u-turn intersections.
- Route guidance signaling entrance into a Noentry zone may occur (No-entry zone, road under construction, etc.).
- Guidance may be given to a position that is not 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 away from the designated route. (e.g. if a turn is made at an intersection while the navigation provided guidance to go straight.)

These situations may occur after conducting route calculation. The following occurrences are not malfunctions:

- Guidance may be given to a position differing from the current position when turning at an intersection.
- When driving in high speeds, route recalculation may take a longer period of time.

Trouble shooting

- 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 dealer

Problem	Possible Cause	
There are small red, blue, or green dots on the screen	Because the LCD is manufactured with technology requiring high point density, a pixel or lighting deficiency 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 screen is being displayed but sound is not working	 Has the volume been set to a low level? Has the volume been muted?	
When the power is turned on, the corners of the screen are dark	 The display appearing somewhat dark after prolonged periods of use is normal with LCD panels. It is not a malfunction. If the screen is very dark, contact your nearest dealer for assistance. 	
Sound is working from only one speaker	Are the positions of Fader or Balance sound controls adjusted to only one side?	
Sound does not work in AUX mode	Are the audio connector jacks fully inserted into the AUX terminal?	
The external device is not working	Is the external device connected with a standard connector cable?	
When turning power on, the most recent mode screen is not displayed	Within modes that play files by reading external sources, such as USB, iPod, or Bluetooth® streaming mode, most recently played mode screen prior to turning off power may not properly load. If the corresponding device is not connected, the mode operated prior to the most recent mode will operate.	

Trouble shooting

Problem	Possible Cause	Countermeasure
The power does not	The fuse is disconnected.	Replace with a suitable fuse.If the fuse is disconnected again, please contact your point of purchase or service center.
turn on.	Device is not properly connected.	Check to see that the device has been properly connected.
The system does not play.	The vehicle battery is low.	Charge the battery if the problem persists, contact your point of purchase or service center.
The image colour/ tone quality is low.	The brightness, and contrast levels are not set properly.	Properly adjust the brightness, and contrast levels through Display Setup.
Sound does not work. level. The connection is not proper. The device is currently fast-forw	The volume level is set to the lowest level.	Adjust the volume level.
	The connection is not proper.	Check to see that the device has been properly connected.
	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.

Trouble shooting

Problem	Possible Cause	Countermeasure
The sound or image	Vibration is occurring from where the conversion switch has been installed.	The sound may be short circuited and the image distorted if the device vibrates.
quality is low.	Image colour/tone quality is low.	The device will return to normal once vibrations stop.
	USB memory is damaged.	Please use after formatting the USB into FAT 12/16/32 format.
The USB does not work	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.	Directly connect the USB memory with the multimedia terminal on the vehicle.
	A USB which is not a Metal Cover Type USB Memory is being used.	Use standard USB Memory.
	An HDD type, CF, SD Memory is being used.	Use 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 recognised 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 recognise downloads.	Reset the iPod and reconnect with the device.

Limited Warranty

LIMITED WARRANTY ORIGINAL NAVIGATION HEAD UNIT SUPPLIED BY VEHICLE DEALER

Product: Product No.:

WHAT THIS WARRANTY COVERS

1. Vehicle Dealer Shop ("Dealer") warrants to you that the Hardware will be free from defects in workmanship and materials under Normal use ("Defects") from the original date of the registration of the motor vehicle ("Warranty Period"). During the Warranty Period the Hardware will be repaired or replaced at DEALER's choice ("Limited Warranty") without charge to you for either parts or labor. This Limited Warranty covers the replacement of the head unit including of the Hardware only.

Period Warranty	Mileage Warranty	
3years	60,000 Km	
*Whichever Occurs earlier.		

^{*}The term of the warranty shall commence from the date of delivery of the new vehicle to the first purchaser.

WHAT THIS WARRANTY DOES NOT COVER

2. The Limited Warranty does not apply to normal wear and tear, does not apply when the Hardware is opened or repaired by someone liquids, proximity or exposure to heat and accident, abuse, non-compliance with the instructions supplied with the Hardware, neglect or misapplication. The Limited Warranty does not cover physical damage to the surface of the Hardware. This Limited Warranty does not cover any software that may accompany or be installed on the Hardware.

The Limited Warranty does not cover the installation, removal or maintenance of the Hardware or any costs related herewith.

HOW TO MAKE A WARRANTY CLAIM

3. In order to make a claim of a Defect, you must contact DEALER. If a defect arises and a valid claim under this Limited Warranty is received by DEALER after the first 3yrs/60,000 km of the Warranty Period, DEALER is entitled to charge you for any reasonable shipping and handling costs made in connection with the repair or replacement of the Hardware. You must comply with any other return procedures stipulated by DEALER, if any.

Limited Warranty

DEALER LIMITED WARRANTY

YOUR LEGAL RIGHTS

- 4. Some countries may not allow the exclusion or limitation of damages. If any part of this Limited Warranty is held to be invalid or unenforceable, the remainder of the Limited Warranty shall nonetheless remain in full force and effect.
- 5. This Limited Warranty is the only express warranty made to you and is provided in place of any other express warranties or similar obligations (if any) created by any advertising, documentation, packaging, or other communications.
- 6. Except for the Limited Warranty and to the maximum extent permitted by applicable law, DEALER and its suppliers provide the Hardware "AS IS AND WITH ALL FAULTS", and hereby disclaim all other warranties and conditions, whether express, implied or statutory, including, but not limited to, any (if any) implied warranties, duties or conditions of satisfactory quality, of fitness for a particular purpose, of reliability or availability, of accuracy or completeness of responses, of results, of workmanlike effort, of lack of viruses, and of reasonable care and skill, all with regard to the Hardware, and the provision of or failure to provide support or other services, information, software, and related content through the Hardware or otherwise arising out of the use of the Hardware. Also, there is no warranty or condition of quiet enjoyment, quiet possession, or non-infringement with regard to the Hardware.
- 7. This Limited Warranty does not affect any legal rights under applicable national legislation governing the sale of consumer goods.
- 8. This Limited Warranty cannot be transferred to any other person.

LIMITATION OF LIABILITY

- 9. Neither DEALER nor its suppliers shall be liable to you or to any third party for any damages either direct, incidental, consequential or otherwise (including in each case, but not limited to, damages for the inability to use the equipment or access data, loss of data, loss of business, loss of profits, business interruption or the like) arising out of the use of or inability to use the Hardware even if DEALER has been advised of the possibility of such damages.
- 10. Notwithstanding any damages that you might incur for any reason whatsoever, the entire liability of DEALER and any of its suppliers shall be limited to the amount actually paid by you for the Hardware.
- 11. DEALER shall not be liable for
 - (I) any fraud on the part of its employees and/or agents; or
 - (I) any fraudulent misrepresentation on the part of its employees and/or agents.
- 12. Notwithstanding the above, neither party's liability for death or personal injury resulting from its own negligence shall be limited.

WARNING & SAFETY INFORMATION

Safety Symbols



A Warning

. When encountering this symbol in the manual, you must follow these recommendations to avoid irreparable damage to your car, system or connected devices or to avoid accidents with injuries or death.

IC Information

This device complies with Industry Canada licence-exempt. RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference

Le present appareil est conforme aux CNR d'industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

The antenna(s) used for this device must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Information

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.

FCC notification to users

This equipment has been tested and found to comply with the limits for a CLASS B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. the user is encouraged to try to correct the interference by consulting with a dealer or an experienced technician for technical assistance.

Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

