

Multimedia Navigation System

Owner's Operation Manual

⚠ Before using this navigation system, please read this manual carefully and preserve it properly for future reference.

V1.0

To avoid accident, please DO NOT watch video while driving .

Safety Info

Please read through this Owner's Manual
Before using this navigation system, please be sure to read through and fully understand the following safety information, so as to enjoy the advanced functions. Please preserve this Owner's Manual for future reference.

Ensure Safe Driving

- Ensure obeying safety driving regulations and current traffic rules.
- Operating this navigation system (and the optional car reversing camera) may distract your attention of driving the car safely.
- If you need to watch the monitor to conduct any system operation, please park the car at a safety place, and take the parking brake, before making necessary adjustment.
- DO NOT set the volume of the navigation system too high, as you may not be aware of the traffic condition and SOS signal outside.

- For safety reason, some functions of the system may be disabled while driving, unless you stop the car or use stopping brake.
- Please DO NOT wear ear phone while driving.
- The blue and white wire at power connector is for detecting the status of car stopping. It must be connected with the power of car stopping switch. Improper connection or use of this wire may be law-breaking, and may endanger your personal safety.
- To avoid car accident and possible breaking to applicable law, please DO NOT use the navigation system for any other purpose other than navigation while driving. Likewise, the rearview monitor shouldn't be used while blocking the vision of the driver.
- When using the monitor connected to rear monitor output, the rearview monitor

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Announcement

output of this system is for connecting to monitor, so as the passengers in rear seats watch program and conduct relevant operation while driving.

- ⚠ Warning:**
- Please DO NOT install or fix your navigation system on your own. Danger could happen when this navigation system is installed or fixed by the personnel without receiving electronic device and automobile parts training, and you may be under the risk of electric shock or other dangers. Please DO NOT watch program and conduct relevant operation while driving.
 - Watching video and conducting relevant operation while driving is prohibited by the laws in some countries. For your and other person's safety, please DO NOT do it while driving.
 - DO NOT contact this system with liquid,

otherwise, electric shock may happen, it may also cause damage to the system, smoke and overheat etc.

Safety Announcement

- The navigation function of this product (and the optional car reversing camera) serves as your assistance while driving. It doesn't mean that you could distract attention, absent-minded or lose judgment while driving. The accident it caused is irrelevant with our company.
- The intellectual right of the digital map written into TF card belongs to the supplier. Map supplier is responsible for the content of it.

Announcement

This Owner's Manual mainly introduces the function, purpose and operation of the vehicle AV system product. This manual serves as an operation guideline for

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Announcement



- users, rather than maintenance service evidence. If there is any alteration of design and specification as the constant improvement of product, we won't deliver separated notice. The product is subject to the material object. For details, please inquiry the dealers.
- The pictures in the manual are for reference only. The error of your understanding is irrelevant with our company.
 - The registered trademarks and product names are held by the companies they belong to.
 - The information in the manual could be altered without making announcement. Our company reserves the ultimate right of explanation of the information provided.
 - If this product couldn't work normally, please inquiry to the customer services department of the manufacturer.

- Without prior written license by our company, any part of this material can't be copied, altered, dispatched or used in any other way.
- Product Notice
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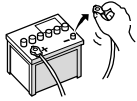
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Before using the system	
Notices before installation	
Product manufacture doesn't recommend you to install or maintenance this navigation system on your own, as you may be under electric shock or other dangers. Please entrust all about the installation and maintenance to the official licensed staff.	as the front or where close to the opening area of vehicle air bag. Please refer to your vehicle user's manual to understand such opening area.
 Warning:	 Caution:
Following dangerous installation positions or approaches are forbidden.	●If hole drilling or other alteration is needed while installing, please consult with the dealer nearby.
●When the vehicle comes to a sudden stop, driver or passenger may be injured.	●When opening hole on panel, please make sure with rear space. Please DO NOT damage fuel cable, brake cable, electrical components, communication cable or power cable.
●Driver's vision or vehicle operation may be hindered. For example, front ground of driving seat, or where close to steering wheel and gear lever.	●When using screw, please make sure it is not contacted with any electric wire. Vibration may damage electric wire or the insulated skin, causing short circuit or damage to other vehicles.
●Driver's ability of safe driving may be influenced.	●For ensuring correct installation, please use the standard parts to install in complied with the regulations. If using any non-standard part, the internal component of
●The product is forbidden to be installed on meter panel, car gate or column, as well	

Before using the system	
the product may be damaged or loosen, resulting product damage.	
●If GPS antenna lead wraps steering column or gear lever, it is extremely dangerous. Please make the installation won't hinder driving.	
●Please make sure all leads won't be hooked by car door or sliding mechanism of the seats, for avoiding short circuit.	
●To prevent from electromagnetic interference, please put other cables or leads away from the FM, AM antenna and their leads, GPS antenna and its lead. You should arrange the above-mentioned leads separated each other. DO NOT bind up the leads or cross them, otherwise, electromagnetic interference may be intensified, leading to incorrect positioning or error display.	
●After finishing navigation system installation, examine and confirm other devices of the vehicles are correctly connected.	
Welcome	
Thank you for using our multimedia vehicle navigation system, we sincerely provide with excellent quality and superb experience to you.	
System Installation	
1. Installation key points	
●This product is used for vehicles with 12V storage battery and negative ground end. Before installation, please check out the voltage in storage battery.	
●To avoid system short circuit, it is recommended to dismantle the negative wire of the battery.	
●DO NOT directly connect this product to storage battery by over passing fuse.	
●DO NOT directly connect the power cable of this product to the power cable of other electric appliances.	

Before using the system



2. Mainframe installation

- Firstly take out the original mainframe.
- Dismantle the bracket and screws, and then preserve them. Use connection cable to finish connection.

- Lastly, put the mainframe in place, and use the original installing screws to fasten the mainframe.

⚠ Caution:

Don't damage or stain the panel.

3. GPS antenna installation

- ① Before using binding tape to fasten the GPS antenna, please be sure to use proper oil soluble cleaning agent to

cleanse the adhering area. After cleansing, tear down the back paper, place the GPS antenna at a proper place, and press it tight with strength.

- ② Dismantle the side panel, take the cable through storage box, to the mainframe at central control platform. Please bind up the cable with the original cables.

- ③ Connect the GPS antenna port with the mainframe.

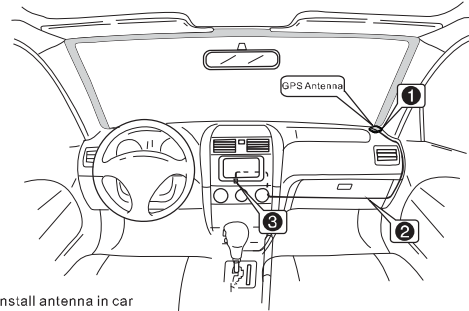
⚠ Caution:

- Please make sure all devices are installed at safe places. If user's vehicle is installed with other devices, please make sure such installation won't interfere with its function.

- Before installation, please read through all instructions. It is advised to ask auto Hi-Fi professional dealer to install this machine.

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Before using the system



Choose to install antenna in car

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Before using the system

Preparation before use

1. Power on/off

Turn on the ACC of the vehicle to on or start the engine, this machine will be automatically powered on and started. Starting picture appears on the monitor. A few seconds later, the following prompting box appears:



Press (AGREE) button to access to the screen last time turning off, turn OFF ACC (turn off engine) to shut down power, the machine will auto save current page—to which would be auto accessed when next time booting.

⚠ Warning:

For safety reason, the machine is designed for not being able to conduct complicated operations like destination setup while driving. Please pull over the vehicle at a safe place, take stopping brake, and conduct operation. Driver shouldn't conduct such operation while driving.

2. Installation steps

- Check if the installation accessories are complete.
- Please dismantle the original Hi-Fi.
- Fasten the positioning bolt and positioning rubber cap onto the mainframe of the navigation system. (Some machines models are not equipped with positioning bolt and positioning rubber cap, so it's no need to install.)
- Use the accessory special converting

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Before using the system

cable to quickly install as per the system connection diagram in the guideline.

Connect the original Hi-Fi cable, peripheral auxiliary devices and mainframe, connect automobile ACC key switch, turn on machine power to have a trial run. If the machine can't be turned on, please firstly check out the wiring, until the solution is found. If the machine can normally work, shut down ACC and turn off the vehicle.

- Install the correctly wired mainframe into the original Hi-Fi position, and make sure the installation stable.

3. Special notices

- Be careful of not damaging automobile wiring.
- To ensure normal playback of CD/DVD, the horizontal angle of installation should be less than 20°, no more than the limit.
- To avoid short circuit when wiring, it's advised to dismantle the negative end of the battery before installation.

- To prevent from accidental damage, please DO NOT plug the parts when power is on.
- Please verify the vehicle model is matching with one of the standard models in the vehicle conversion line of the navigation system.
- Please check out the connection of auto wiring with Hi-Fi cable in navigation system.
- Before power on, please confirm all parts of the system are correctly connected. Please verify the standard (+) pole (yellow) and ground wire (black) in converting cable in navigation system accessories are not short circuit. Connect the power cable to other wire may damage the machine or vehicle.
- DO NOT directly connect the power cable of this product to the power cable of other electric appliances.

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4. Insert and take out Disc

- **Insert Disc**
Directly put part of the Disc (text facing up) into the slot, and then the device will automatically suck the whole Disc into the slot.
- **Take out the Disc**
Press (OPEN) or (▲) key, the Disc will be ejected.
- ⚠ **Caution:**
 - When the Disc is unable to be ejected, press and hold (▲) key for 2 seconds, the Disc driver will auto restart after power off, and the Disc can be ejected.
 - After removing disc, please packaged it in CD-ROM box for safekeeping.

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Front panel diagram



⚠ Caution:

- This picture is for reference only, the product is subject to material object !

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Function of front panel parts

LCD monitor—for touch screen control

AV (Audio Switching)—Press it to rotate among DVD, FM1, FM2, AM, AUX and MP3.

SEEK+ (Next)—When playing AV, press it to select next song; when listening to radio, press to select next radio channel.

SEEK- (Previous)—When playing AV, press it to select previous song; when listening to radio, press to select previous radio channel.

MENU (Main Menu)—Press it to switch to main menu at any time.

Power and volume knob—Adjust the output volume

- Turn it clockwise to increase volume, turn it counter-clockwise to decrease volume.
- Press the knob to turn on/off mute.
- Press and hold the knob for 2 seconds, monitor will be in stand-by mode, touch screen to continue previous operation.

Disc in/out slot—Insert and take out Disc

OPEN (Disc in/out control)—To eject Disc, if without Disc, press it, the monitor will display "insert Disc" prompt.

NAVI (Navigation screen)—Short cut to access to GPS navigation screen.

DEST (Destination)—Access to destination setup.

LOCA (Navigation location)—Touch screen to continue Navigation screen.

SETUP (System setup)—Alter system relevant setup.

Radio tuning knob

- When listening to radio, turn the knob to select channel.
- Press the knob to access to "tune and balance".
- In GPS navigation screen, turn the knob to zoom in/out the map.

TF card slot—Insert a TF card with GPS navigation software.

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Touch screen operation

Main menu

At the first time to run this system, press (agree) button in Caution screen, LCD monitor displays the default DVD screen. Click to return to main menu, as following picture :



In the main menu, there are 10 functional buttons, as

(DVD) : Play DVD, VCD, CD and MP3.

(Radio) : Listen to FM1, FM2 or AM

channels.

(iPod) : Playing the songs or segments in iPod. (Note : with extra iPod cable to realize this function).

(MP3) : Playing the song and image in USB or SD cards.

(Video) : Inside the video playback from USB.

(Navigation) : Access to GPS navigation system.

(Bluetooth) : Bluetooth phone function, dial or answer the phone via bluetooth.

(A2DP) : Playing the music in mobile phone via Bluetooth module.

(TV) : Playing mobile TV.

(AV IN) : Connect to external device.






(⚙) : Display and setup relevant information in the vehicle.

(📶) : Details in P35.

(🌬) : Automotive air conditioning control functions.

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Functions and AV operation

- () : Press()button to switch to night mode, button indicator will be on,screen is dark.Press () again to switch to day mode.
- () () : Between day mode and non-day mode, user may choose 1 out of 4 display modes as needed.

⚠ Caution :

- In this system, many functions are optional, and useable only when they are chosen. For detailed operation, please see optional function.

1. Disc Playback

⚠ Warning:

- For safety reason, when watching the image on monitor, please stop your vehicle and take stopping brake. For

detailed setup, see the "brake sensing" setup in later pages(P-31).

DVD Disc playback

When the following picture appears in the monitor, the way to insert Disc: see the previous instruction of "Insert and take out Disc"(P-7).







Insert Disc to auto access to playback screen. If this Disc is a DVD, you will see the following screen:



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Functions and AV operation



- (TITLE 1) : Current playing program title.
 (TRACK 1) : Current playing track No.
 (0'8") : Display the playing time elapsed.
 () : Folder of current playing program.
 () : Name of current playing program file.
 () : Press it to play previous song or track.
 () : When Disc is in, press it to start playback; in playing mode, press it to stop playback; in playback

mode, press it to pause. When it's in pause or stop mode, press it to resume normal playback.

- () : Press it to stop playing Disc.
 () : Press it to play next song or track.
 (TRACK LIST) : Press it to access to another screen displaying all tracks or songs in the Disc.
 (FOLDER) : Press it to access to select folder.
 (BLCD) : Control rearview display output.
 (4:3) : Display 4:3 video.
 (16:9) : Display 16:9 wide screen video.
 (Full Screen) : Press it to show full screen video.
 (Video) : Press it to access to video

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Functions and AV operation

operation and menu screen, as following picture :











- (MAIN MENU) : This is second level menu. If it's playing, press it to pause, and access to track selection screen. The screen list all tracks or songs in the Disc, you may choose any track to play as you like.
 (MENU) : This is first level menu. If it's

playing, press it to pause and access to Disc main menu.

- (AUDIO) : When using Disc recorded with multiple sound tracks format, press it when playing to switch to sound tracks in different formats (multiple format) .
 (SUBTITLE) : When using Disc recorded with multiple subtitles, press it when playing to switch to different subtitles (multiple subtitles).
 (SETUP) : Adjust video color, contrast, chroma and brightness, as following picture:



- (-) or (+) : Increase or decrease, adjust to appropriate visual effect.
 () () () ()
 Button functions and operations are completely the same as those in Disc screen.
 () () () ()

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Functions and AV operation

Playing CD or MP3 Disc

When VCD Disc is inserted, following picture appears:



Part of function and text are similar as those in DVD function screen.

- (RPT) : Press it to rotate playback mode
 (Shuffle) : Press it to start random playback.
 (BLCD) : Control rearview display output.
 (TRACKLIST) : Access to another screen displaying all tracks or songs in the Disc, as following picture.

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- Caution :**
- Touch the button on screen to select relevant track or song for playback. The selected button will be highlighted, with serial No. and time displayed on top of the screen.
- (FOLDER) :** Press it to show files list, as follows:



Program navigation : Touch **(Prev)** and **(Next)** on touchscreen to navigate files list or folders list.

Sound Effect Setup

Click **(EQ)** to access to Sound Effect setting, as following picture:

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The item selected will be highlighted.

- (Classical)** : Classic also requires elevation of both ends, mainly highlighting the performance of instruments.
- (Pop)** : Pop music requires an average combination of vocal and instruments, so the curve is not seriously fluctuated.
- (User1,2,3)** : Customized audio effects.
- (Flat)** : In each segment, it displays 0Hz.

(Back) : Press this button to return to upper level operation interface.

Tune and balance

To a large extent, the quality of sound effect is subject to the mixed level of treble and bass. Actually, different music and vocal would be better under different sound levels. It's very important to keep optimal balance of right and left channels, as well as front and rear sound levels. Taking it into account, this product provides with AUDIO button in the pages of Disc, Radio, iPod, MP3 and Bluetooth music, press this button to set up treble and bass, as well as sound balance between front and rear, left and right, as following picture:

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- (▲▼◀▶)** : Adjust the sound balance within all speakers.
- (🔊)** : Make the volume of speaker at the balance point.
- (2.0,4.0,5.1 Canal)**: Select 2.0 channels, 4.0 channels and 5.1 channels, perfectly matching the digital amplifier.
- (Loudness on)**: To turn on loudness, elevate bass when in small volume, without making effect when in large volume.

(Back) : Press this button to return to upper level operation interface.

Caution :

- When listening to stereo CD or radio, change left/right balance, the volume of a group of sound will increase, while that of the other group will decrease.

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2.Listen to radio

Receive radio signal
AV sound source is switched to radio. Press AV key to switch to radio, or select radio on main menu to access to radio page, receiving the radio signal last time received.

Caution :

- Auto preset radio stations are listed.
- In tunnel, behind mountain, between mansions, where radio wave would easily interrupted, or where radio wave is weak, signal received is also weak. Even though with the list, sometimes signal couldn't be received according to current location and condition of radio wave.



- (107.90MHz)** : Frequency of radio currently playing.
- (FM1)&(FM2)** : Press it to select FM radio station.
- (AM)** : Press it to select AM radio station.

Press corresponding button to switch one mode to another.
There are 1 to 6 storage units for reserving radio channel under each mode. Touch the radio frequency stored in the unit to listen to this channel.

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Functions and AV operation

(Scan) : Auto Search channels.

Caution ,
 •When battery is disconnected or fuse is burn, the preset channels will be deleted.

Search radio frequency :

Preset channel : Directly click on the radio channels stored in the list.

Manual : 1. Touch (▼) , (▲) Button to select the channels needed.
 2. Turn "radio tuning" knob on the panel to select the channel needed.

Auto : Touch (SCAN) button on operation screen to auto scan frequency. When channel signal is found, the search will auto stop. Press this button to search for next frequency.

3. iPod Control

When iPod in the setup page is "ON", iPod is connected. Click on the iPod icon in main menu to access to the following page:



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Functions and AV operation

(TRACK 01/06) : Total currently playing songs .

(00'12") : Time elapsed in song list.

() : Single song rotation (controlled by RPT button.)

() : Random playback (without this mark, playback is in order.)

(00'12~03'52) : Songs playback timeline.

(BLCD) : Control rearview display output.

() : Press it to play previous song or track.

() : Press it to play next song or track.

() : When playing, press it to pause, re-press it to resume normal playback.

(RPT) : Press it to switch to rotating playback mode.

(Shuffle) : Press it to switch to random play back mode.

(Search) : Click it to access to playback list.

"Song navigation" : Press(Prev)(Next) button to turn the page As following picture : "▲"

"↩Back" : Return to iPod folder page.



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Functions and AV operation

(Video) : Press it to access to video page.



() : Press it to play previous song or track.

() : When the Disc is inserted, press it to start playback; when in playback mode, press it to pause. When it's paused or stopped, press it to resume normal playback.

() : Press it to play next track or song.

(SETUP) : The same as DVD operation.

4. MP3 Player Control

Click(Mp3) button to access to MP3 player control screen, as following picture:



(USB1 or USB2) : In(Playlist) select one playback device. The icon on it will correspondingly change to blue, indicating playing the music or image in the device.

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Functions and AV operation

(TRACK 2/17) : Currently playing track No.

(01'34") : Display elapsed playing time.

(Display bar) : 3 bars are for displaying song name, singer and album name.

(01'34"~01'37") : Song playing timeline.

() : Press it to play previous song or track.

() : Press it to play next song or track.

() : In playback mode, press it to pause, Press it again to resume normal playback.

(RPT) : Press it to switch to rotating playback mode.

(Shuffle) : Press it to switch to random playback mode.

(Playlist) : Press it to access to another screen displaying all tracks and songs in the Disc.

(Prev)(▲)(Next) : To select song, using the slide bar in the middle can also turn to another page.



5. Video playback control

Click(Video) button to access to video player control screen, as following picture:

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Functions and AV operation



- (**TRACK 01/05**) : Currently playing track No.
 (**00'42**) : Currently playing video.
 (**00'42**) : Playing timeline.
 (**⏮**) : Press it to play previous song or track.
 (**⏸**) : In playback mode, press it to pause. Press it again to resume normal playback.
 (**■**) : Press this button to stop playing.
 (**⏭**) : Press it to play next song or track.

- (**Shuffle**) : Press it to have random playback.
 (**Playlist**) : Press it to access to another interface displaying all segments or programs in the disc, as following picture:



- (**Prev**) (**⏮**) (**Next**) : To select song, using the slide bar in the middle can also turn to another page.

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Functions and AV operation

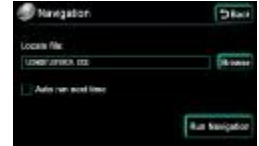
- (**Video**) : Press it to access video playing page, as following picture:



The interface operation is similar to iPod video. (P-19)

6. Navigation system

Click on (**Navigation**) icon in main screen to access to Navigation control screen, as following picture.



- (**Run Navigation**) : Click on the map software in the pathway.
 (**Browse**) : Click it to see the map, as follows :

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Functions and AV operation



- (**Prev**) (**⏮**) (**Next**) : To select song, using the slide bar in the middle can also turn to another page.

Keys operation :

Press (**NAVI**) key on the front panel to access to above navigation software selection.

Navigation notes

- Global Position System (GPS) is developed and operated by US Ministry of Defense, who is entirely in charge of the accuracy and maintenance of the project. Any alteration made by this unit may affect the accuracy and performance of GPS devices.
- Please use this GPS navigation system prudently. This system provides with navigation reference. DO NOT use this system for accurate measurement of direction, distance, location and terrain.
- When firstly taking GPS satellite positioning, please stay at the same location, where is preferable open space, without shield above.
- First positioning may need over 3 minutes, subject to current environment and satellite signal.

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Functions and AV operation

- DO NOT operate the navigation system while driving, so as to ensure safe driving. To avoid accident, please operate this system after safely pulling over the vehicle. Wireless communication product (e.g. mobile phone, speed alarm etc.) may interfere with the receiving of satellite signal, leading to inconsistent signal received.
- If any insulation film or explosion-proof membrane is installed in your vehicle, satellite signal may be interfered with.

⚠ Caution:

- The traffic units in all areas will adjust property of road (one-way street, left turn forbidden etc.) according to local traffic condition. Please be sure to obey the local traffic instructions. If the road condition differs with what the map shows, please make your own judgment if this road should be taken.

Map

- As with rapid urban construction and town and country highway traffic development, traffic regulation information of city streets keeps changing constantly. After launching for some time, the product may provide traffic information not exactly matching actual practice. Driver should be aware of actual traffic condition, so as to avoid going against traffic rules.
- As with the change of traffic regulation or temporary road control, the instructive

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route provided by this navigator may not be matching actual practice. Please drive as per actual traffic control or regulation.

- The navigation routes provided by this device are for driving reference only. For example, in driver's familiar area, it may be more effective when choosing routes on his own, rather than following planned routes.

Receive satellite signal

Normally, as long as receiving the signal over 3 satellites, the navigation system can accurately locate your position, but sometimes the signal received may be affected by weather or skyscrapers.

7. Bluetooth telephone control

Click on the Bluetooth functional key in main menu, as follows:



- (Pair) : Click to match Bluetooth mobile phone.
- (Handheld) : Change to receive by mobile phone.
- (Hands Free) : At hands-free calls mode.
- (Bluetooth ON) : Gray indicator turns yellow meanwhile "B" turn blue indicating.

Bluetooth is on, click(Pair). Otherwise, it's off and not for matching mobile.

- () : Receive or dial button. It turns green when dialing or receiving call.
- () : Ending call button. It turns red when making phone call. Press it to end the call and it turns grey.
- (Del) : Delete the error number when operating.
- (Records) : Press it to show the following picture:



- (Back) : Return to upper level menu.
- (Received calls) and (Dialed calls) : Save the recent 20 received and dialed calls.
- (▲) and (▼) : Check phone call records.
- (Clear all) : Delete all received and dialed record.
- (Bt Records) : Press it to see the following picture:



- (Car Records) : Jump to vehicle record page.
- (Missed Calls) : Missed call list.
- (Received Calls) : Received call list.
- (Dialed Calls) : Dialed call list.
- (SIM Contacts) : Phone book stored in SIM card.
- (Phone Contacts) : Phone book stored in mobile phone.
- (search) : Press it to access the following picture. Input spelling to inquire the contact person:



NOTE: No more than 7 letters are input each time. Using letter to search contact person, there will be 2,000 of the name and phone number of contact persons at maximum.

8. Bluetooth music control

Play the music in mobile phone via Bluetooth



- (◀) : Press it to play previous song.
- (▶) : When mobile phone is connected, press it to start playback.
- (■) : In playback mode, press it to pause.
- (■) : Press it to stop playing.
- (▶▶) : Press it to play next song.
- (Back) : Return to upper setup page.

9. Setup function control

① Press (Settings) button on main menu, to access to the first page of Settings page:



- Auto Switch to GPS (ON), (OFF) :** When it's (ON), and 10 seconds after operation in other page, it will auto switch to navigation page. When it's (OFF), this function is turned off.
- GPS Voice (ON), (OFF) :** When it's (ON), turn on GPS voice. When it's (OFF), turn off GPS voice.
- Rearview Camera (ON), (OFF) :** When it's (ON), camera will capture the

Functions and AV operation

Rearview Camera (ON), (OFF):
When it's (ON), camera will capture the car reversing live video onto the monitor. When it's off, no such live video will be provided. It remains the original operation screen.

Caution :
■ This function is valid for the cars with CAN BUS control .

Auto Dimmer(ON):
Day/night mode button in menu disappears. Turning vehicle light on/off may control the day mode and night mode of screen. When turning on the head lamp, the screen will be in night mode. When turning off the head lamp, it's in day/night mode.

Auto Dimmer(OFF):
When day/night mode button appears in

main menu, press it to adjust the day mode and night mode of the screen.

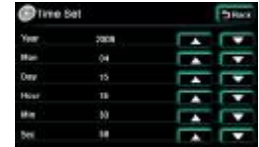
Brake Override (ON), (OFF):
When it's ON, DVD or video picture from auxiliary input can't be shown until taking stopping brake. But audio is not affected by this setting. When it's OFF, you may access to DVD or video picture from auxiliary input at any time.

Info : Click to display the relevant info about MCU,iPod,Barcode,Bluetooth, MPEG andUUID, as following picture:



Functions and AV operation

Time Set : Click (Time Set) button to setup, as following picture:



“ ▲ ”and “ ▼ ” : Set up relevant time: parameters of the system.
“ ⬅ Back ” : Press it to return to setuppage.

ⓐ Press (Next) button to 2nd (Settings) page,As following picture :

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Functions and AV operation



(Steering Wheel Buttons) : When steering wheel study is(ON), you may then use (▲) & (▼) to select steering wheel.

(Steering Wheel Customize) : When it's (OFF), turn off steering wheel study, steering wheel becomes default. When it's (ON), click to access to(Learn) operation page, as follows:



“Mode” : Click to highlight it, and click the corresponding key in steering wheel, and click apply to successfully set up your desired shortcut key. Other key functions are the same as those of “mode” operation.

(Navigation Volume Level) : Use(▲)&(▼) buttons to adjust the volume of navigation map.

(Turn On Volume) : Use (▲)&(▼)to adjust volume output.

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Functions and AV operation

(Button Back Lighting) : Use(▲) &(▼)keys to setup the brightness of panel indicators, in consistent with other keys.

(Calibrate Touch Screen) : When touch screen becomes insensitive or with drifting sign, it's needed to verify the touch screen area, in following steps : Start up the system, “notes” page appears, when seeing “agree” button, press and hold the screen for 3seconds. A white page appears, follow the text prompt on the screen, slightly and accurately use finger or touch pen to hit the center of cross cursor in order. After successfully verifying, cross cursor disappears, 30seconds count-down starts at the center of screen. In such time hit on the screen to confirm the verify data, Otherwise the verification is invalid, as follows :



ⓑ (Next): Return to upper setup page, press (Next) button to access to page 3 of (Settings) page, as following picture:



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(Turner Region) : Use(▲)&(▼) keys to select the radio channel of your desired nation.

24 Hour Clock(ON), (OFF) :
When it's (ON), the time is in 24-hour system; When it's (OFF), the time is in 12-hour system.

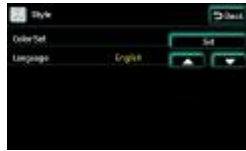
(Timezone) : Use (▲) & (▼) buttons to select your desired time zone.

(System Reset) : Click on system reset key to restart the mainframe CPU and GPS system.

(System Update) : Product software update.

“ ↶ Back ” : Press it to return to setup page.

(⏏) : Click on the main menu (Style) icons, as shown below:



(Colour Set) : Personalize page color, as following picture:



“ - ” “ + ” : Add or reduce RGB color value. Including: “Blue”, “Orange”, “Green”, “Yellow”.

For quick switching system color, user may use R, G, B to customize color style, press and hold the definition to save it.

“ ↶ Back ” : Return to the setup page of upper level.

(Language) : Use (▲)&(▼) to switch language.

Optional function

Rear LCD
Click on (BLCD) to access to setup page, as following picture:



(DVD Mode) : Press it to select playing Disc.

(⏮) : Press it to play previous song or track.

(⏭) : When Disc is in, press it to start playback; When the Disc is playing, press it to pause. When it's paused

and stopped, press it to resume normal playback.

(■) : Press it to stop playing Disc.

(⏭) : Press it to play next track or song.

(↶ Back) : Return to main menu setup.

Watch TV program
Click on the (TV) button on the main menu to see following picture:



(Scan) : Click to auto search TV channel.

(Setup) : The same as (DVD) setup (see P-13 for reference.)

(Menu) : Program setup menu.

(Program) : Press it to watch the preset TV channel.

(Prev) : Choose previous channel.

(Next) : Choose next channel.

(Stop/Back) : Cancel/return to an operation.

⏏ : In (TV)page, use this button to move the cursor from all directions, press (OK) button to select it.
(Hint: ◀ / ▶ may adjust volume.)

NOTE : Press Menu to access to the following TV setting interface:



Access to Program interface:



The control and operation of Air-conditioner:

Click(Air-Condition)in the main Menu to access to air-conditioner interface as the following picture:






(MAX) : Remove fog and frost on windshield.

() : Flow is mainly from the air-duct of front windshield.

() : Flow is mainly from the panel air-duct.

Optional function

- () : Flow is mainly from the air-duct on the ground.
- () : Remove fog and frost on rear windshield.
- (-, +) : Adjust fan rotating speed(OFF); Turn off air-conditioner.
- (**AC**) : Turn on A/C system. When it's off, it's blowing natural wind. Press(**AC**)icon to highlight it in yellow.
- (**AUTO**) : Auto-operating AC, press (**AUTO**)button to turn on the indicator, showing that the auto-operating mode is selected. In the status of auto-operating, A/C setting will select the appropriate fan speed or turn it on/off according to the temperature.
- () : Re-circulate the air in the test running car.

- (**REAR**) : A/C fan control at rear seat.
- (**ACMAX**) : Compulsory refrigeration. Normally it is used when newly getting into the car in summer. Press the icon to highlight it in yellow.

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Playable Disc type

Playable Disc type

Disc label side, package box and package bag have the following marks.

Playable Disc type and mark	Size/sides	Longest playing
	DVD 12cm/single side 1 side2 sides 12cm/double sides 1 side2 sides	(MPEG2format) 133min 240min 266min 484min
	CD 12cm/single side	74min
 Is a registered remark of DVD Format/ Logo licensing Corporation		

⚠ Caution:

- Part of functions can't be used in DVD/CD Disc.
- DVD-R/RW disc is for playing the files in Vid-eo format.
- Files in VR format can't be played in DVD-RW Disc.
- For playing the Disc burnt by PC, but sometimes it can't be played subject to application setting or environment. Title or other text information may not be displayed in this machine.
- DVD-R/RW Disc burnt in video format and music CD or PC-burnt CD-R/CD-RW may not be able to play in this machine, due to scratch, stain or internal lens dirt or dew.
- Sometimes, due to direct sunlight or high temperature or abnormal condition in vehicle, CD-R/RW Disc may not start to play.
- Unable to play any CD-R/RW Disc burnt in DDCD (Double Density CD) format, and unverified CD-R/RW, DVD-R/RW Disc. Only the Discs with above labels can be played in

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Use of the monitor

Use the monitor correctly

1. Notes of use

- DO NOT expose the monitor under direct sunlight or high temperature area, otherwise, LCD failure may happen.
- When not using this machine, please avoid exposing the monitor to direct sunlight.
- Use the monitor within the following temperature range:
Temp. range of use : -10 °C~+50 °C
Temp. range of preservation : -20 °C~+80 °C
- For easy watching in vehicle, LCD monitor sticks out. Please DO NOT press with LCD monitor surface with strength, as it could lead to failure. When slightly touching the monitor, except verifying the coordinator, please make sure using finger to softly touch it, otherwise, it may be damaged or sticking with dirt.
- In vehicle installed with the likes of saefair bag, please note DO NOT hinder the

working of safety device.

2. About LCD screen

- The LCD monitor sometimes may be with a black dot or a flashing dot (bright dot). This is a unique phenomena of LCD monitor, rather than failure.
- When using it in cold area, after connecting to power, the screen may be dim initially. After a while, the brightness will resume normal.
- If with direct sunlight on LCD monitor, the screen may be unclear due to light reflection.

3. About maintenance





- When cleansing the dirt on screen, please turn off power and use soft cloth to wipe it.
- When wiping monitor, please avoid scratching by fingernail.
- DO NOT use wet cloth, volatile oil or diluents.

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How to use Disc

How to use Disc

1. Notes of handling Disc

- DO NOT use any Disc with crack or stain, or bended.

- DO NOT use abnormal (non-perfect rounded) Disc, so as not to cause failure.

- DO NOT touch the info side (with gloss) of the Disc when handling it. DO NOT hurt the Disc.

- DO NOT stick paper or label on the Disc.


2. About maintenance

- If the Disc is covered with dirt, please use clean soft cloth to wipe the Disc from inside out.

- DO NOT adhere volatile or diluents/diluent onto the Disc. Besides, DO NOT use the cleaner for analogue recorder or antistatic agent.


3. Notes of preservation

- DO NOT expose the Disc under direct sunshine or where is at high temp.
- Keep the Disc in box, so as to avoid bending.

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Trouble shooting

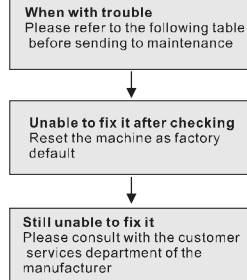


4. About Disc Playback Environment

- While driving, Disc data can't be correctly read due to vibration.
- In low temp environment, please play the Disc upon turning on heater. Due to lens or Disc player could be with moisture condensation (condensation effect), normal playback may not be able to start. At this time, wait for about a hour, until the dew is evaporated, and then use soft cloth to wipe out the dew remained on the Disc.
- When temperature rises, protection

function will be triggered, and some functions will be stopped.

Trouble shooting



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Trouble shooting

Common problems

Trouble	Reason	Solution
Unable to power on. Not working.	All leads and connectors are not correctly connected.	Reconfirm stable connection.
	Blown fuse.	Check reason of blown fuse, and replace it with the fuse of the same specification.
	For noise reason, built-in computer error.	Press reset button.
No response to touch key on screen, or being insensitive.	Touch key shifting over actual reaction location.	Conduct Touch screen coordinate verifying.
Unable to play.	Disc with dirt.	Clean the dirt on Disc.
	Unacceptable Disc type.	Confirm Disc.
	With wrong Disc side up.	Insert Disc with label side up.
Turn on the ACC of vehicle (start engine) , with engine sound.	Confirm the Disc is inserted.	Normal working
Black dot or bright dot on LCD screen.	Unique LCD phenomena, rather than failure.	

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Trouble shooting

Dark LCD picture.	Improper Brightness adjustment.	Adjust brightness.
	Too cold in the vehicle.	Low surrounding temp leads to dark monitor. Use heater to warm up the interior vehicle.
No sound.	Volume is 0.	Increase volume.
	Connection error.	Confirm correct connection.
No image display.	Not connect to parking brake line.	Connect to parking brake and execute it.
	No parking brake.	
	Turn off monitor.	Press POWER key or touch the screen.
No navigation system image display.	Not being switched to navigation.	Switch the image into navigation system.
No sound from front or rear speaker.	Improper volume adjustment in front or rear speaker.	Correct adjustment and setup.
No sound from left or right speaker.	Improper volume adjustment in left or right speaker.	

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Trouble shooting

DVD Video

Trouble	Reason	Solution
Unable to play.	The Disc inserted can only be played from Disc menu.	Play from Disc menu.
No image display.	Vehicle is driving.	When brake cable is detected ON , no image can be played while driving, but with music only.
	Access to navigation picture.	Press (AV) button to switch picture.
No sound.	Standstill picture, in slow motion.	Standstill picture and slow playback are without sound accompanied.
Unable to switch audio and subtitle language.	The DVD is recorded with 1 language soundtrack only.	Unable to switch over the Disc recorded with 1 language soundtrack only.
	Limited switching from Disc menu only.	Switch over Disc menu.
Unable to execute initial setup audio and subtitle language.	The DVD isn't recorded with initial setup language.	Such DVD is unable to switch to the selected language.
When playing Disc, picture chaos or dim.	The Disc is recorded with copy-forbidden signal. (It may be recorded subject to Discs).	As the system is with function of preventing from analogue copying, when playing Disc recorded with copy-forbidden signal, some monitors may appear horizontal stripes, This is not failure.

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Trouble shooting		
Pictures tagnant, unable to operate.	Unable to read data when playing Disc.	Wipe out the dirt and play again.

CD/MP3Disc		
Trouble	Reason	Solution
With mass noise while playing CD, suddenly comes to a stop while playing.	Scratching or bending the Disc.	Change to another Disc, if improve, it proves that it's Disc problem.
	Disc is very dirty	Wipe off the dirt.
	The Disc is sticking with mist or water drop.	Wipe out the mist or water drop.
Mass noise or no sound while playing MP3 file.	Non-MP3 file is attached with [.mp3] extension name.	Please replace the Disc (Don't attach [.mp3] extension name to non-MP3 file)
M P3 files are played in a different sequence to burning.	M P3 files sometimes aren't played as per the burning sequence.	Some files with names like **01, **02... can be played as per set sequence.

Terms Definition
<p>Terms Definition</p> <p>1. CD/MP3 Disc</p> <p>CD-DA</p> <p>Abbreviation for "Compact Disk Digital Audio", means uncompressed common CD.</p> <p>MP3 (MPEG Audio Layer3)</p> <p>"MPEG Audio Layer3" means MP3, sound compression format specified by Moving Picture Expert Group (MPEG) of ISO(International standard organization).MP3 could compress the sound to 1/10 of original data content</p> <p>ISO9660 Format</p> <p>According to international standard of CD-ROM file and folder logical format. ISO9660 format is limited by following level:</p> <p>Level 1 : File name is 8.3 type (comprising of capital English letters and number, and "-", with name less than 8 characters, extension name less than 3 characters), all folders have no more than 8 levels.</p> <p>Level 2 : File name is with up to 31 characters. (Including separating character, "-" and extension name)</p> <p>All file folders are with no more than 8 levels.</p>
<p>Extension format :</p> <p>Joliet: Max. 64 characters in file name</p> <p>Romeo: Max. 128 characters in file name</p> <p>Multi-segment writing</p> <p>Multi-segment burning is a data written way to supply additional data. When burning CD-ROM, CD-R and CD-RW, the process from beginning to ending one burning makes a segment. Multi-segment burning is to burn more than two segments of data on one Disc.</p> <p>Id3 Tag</p> <p>An approach to embed the relevant info of a song into MP3 file. The info for embedding comprises of song name, artist name, album name, device type, production year and comment etc. The content can be edited by software with ID3 Tag editing function. Usually it is limited by character number. When playing songs, the info can be seen</p> <p>Byte rate</p> <p>It is the data provided in 1 second, with unit of bps (bits per second). The larger number means more playable information for music, so the larger number means the better music quality.</p>

Terms Definition
<p>VBR (Variable Bit Rate)</p> <p>"Variable Bit Rate" is short for VBR, commonly known CBR (Constant bit rate). When compressing audio, bit rate is variable as per compression condition.</p> <p>PacketWrite</p> <p>Like using floppy disk and hard disk, write the desired file into the likes of CD-R.</p> <p>m3u</p> <p>Extension file name of playable file (m3u), attaching to the playback file list made by WINAMP.</p> <p>2. DVD Video</p> <p>Title</p> <p>DVD has mass content—1 Disc can hold several movies. For example, there are 3 movies in it—mov1, mov2, mov3. All file names can be inquired.</p> <p>Chapter</p>
<p>DVD titled content is divided into several segments with identifiers, for chapter inquiry.</p> <p>Multi-angle</p> <p>Typically, TV camera shoots program at certain angles, with only 1 angle in playback. Some DVDs comprise of all shooting angles for viewers to choose.</p> <p>Multi-soundtrack</p> <p>DVD may comprise of multiple soundtracks, for you to choose language.</p> <p>Multi-subtitle (Subheading)</p> <p>DVD may comprise of subtitles up to 32 languages. Viewer may self-define his own language.</p> <p>Area Code</p> <p>DVD player and DVD Disc are with different playing area codes for every sales area. If the Disc doesn't comprise of the code in the player, playback can't be started. The area code of this machine is (6).</p>

Specification
<p>Specification</p> <p>(As the product keeps improving, if with change of specification, please forgive that we won't have separated notice)</p> <p>Universal</p> <p>●Max current consumption:10.0A. PowerDC14.4V(Usable11V~16V). Grounding : Negative pole grounding. External image input level: 1V p-p(75Ω load). External audio max input level1.5V/22KΩ. Image output level: 1V p-p(75Ω load) (white100%output /when playing DVD).</p> <p>GPS</p> <p>●Approach : L1, C/A code GPS SPSstandard, positioning service. Receiving way : 12 channels. Receiving frequency : 1 575.42MHz.</p>
<p>Amplifier and audio parts</p> <p>●Rated power output:22W X 4(10%T.H.D). Max. power output:45W X 4. Load impedance:4Ω.</p> <p>DVD player parts</p> <p>●Support Disc:DVD-ROM, DVD-VIDEO, DVD-R(video mode) /RW (video mode), CD-ROM, CD-DA, CD-R/RW. Area No. : 6. Signal format (Sampling rate) (DVDvalue) : 48/96 Khz (Cdvalue) : 44.1 Khz Signal format (quantization B it) (DVDvalue) :16/20/24B it line (Cdvalue) :16B it line Frequency response:20Hz~20KHz(±3dB) Audio SNR : ≥65dB.</p>

Specification

Channel separation : $\geq 50\text{dB}$.
 Audio distortion plus noise: $\leq 0.03\%$.
 Video output level: $1.0 \pm 0.3\text{Vpp}$.
 Line synchronous amplitude: $0.3 \pm 0.1\text{Vpp}$.

FM tuner parts

- Frequency band: 87.5MHz~108MHz).
- Practical sensitivity: $\leq 12\text{dB}\mu\text{V}$.
- Locking sensitivity: $35\text{dB}\mu\text{V}$.
- SNR: Over 50dB (IHF-A network).
- THD: 0.3%.
- Frequency response: $\geq 2\text{KHz}$.
- Stereo crosstalk: $\geq 27\text{dB}$.

AM tuner parts

- Received frequency band: 531kHz~1602kHz (9kHz).
- 530kHz~1604kHz (10kHz).
- Practical sensitivity: $\leq 28\text{dB}\mu\text{V}$.
- Locking sensitivity: $\leq 45\text{dB}\mu\text{V}$.

Monitor part

- Screen size: 6.5inch, 6.95inch, 8.0inch.
- Display area: 144X78.4, 158X83.6, 177.64X100.35.
- Pixel resolution: 800x480.
- Approach: TFT active matrix, transparent.
- Edge illumination : Cold cathode L tube.
- Color system : NTSC/PAL compatible.
- Temperature range for working: $-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$.
- Temperature range for preserving: $-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$.
- Touch screen : Resistance induction analog (film + glass).

GPS antenna

- Antenna: Microwave transmission with flat plane antenna/Right circular polarization wave antenna cable length : 3.0m.

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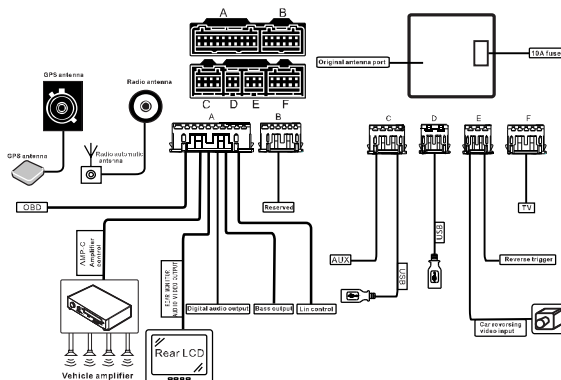
Specification

Dimension and size

- Installation size of navigation system mainframe: 178(W) x 100(H) x 165 (D)mm.
- GPS Antenna: 39(W) x 15.5(H) x 48.5 (D)mm.
- Total weight: about 2.5kg.

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Quick installation guide. Before installation, please read through all instructions.
It's advised to entrust professional automobile Hi-Fi dealer to install this machine



FCC Caution.

§ 15.19 Labelling requirements.

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.

§ 15.21 Changes or modification warning.

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

§ 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This

equipment generates uses and can radiate radio frequency energy 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.

* RF warning for Portable device:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

