| How to call |

1. Dial a telephone number and click "Call" on the dial pad.

2. The main menu appears along with the volume level indicator.

3. Click the 📞 icon to go to the Call Status screen to change the calling status or stop the call.

4. If dial pad is needed for ARS during a call, please click "Dial Pad" on the Call Status screen and the dial pad pops up.

5. To change from Hands Free to mobile phone or vice versa, please click ④.

6. During a call, you may want to click Mic Mute so the person on the other end does not hear the noise or other conversations in your area.

[Dial Pad]

[Main menu for making a call]

① Bluetooth enable

② Bluetooth disable

③ Exit

④ Delete

⑤ Explore

⑥ Connect

⑦ Disconnect

⑧ Explored Bluetooth device list

[Call Status screen]

[Dial Pad for making a call]

| Receiving a call |

1. The screen for receiving a call automatically pops up on your device upon receiving a call.

2. Click the "Call" button to answer it. Or click the "Cancel" button to refuse a call.

3. Clicking the "Call" button automatically activates the main menu.

4. Click the 🖐 icon for the Call Status screen to change the call status or hang up.

5. In case you receive another call on the line, please click the 🖐 icon to access the second caller's screen.

   Please click the ① button to shift between callers.

6. To change from Hands Free to mobile phone or vice versa, please click the "Change the calling device" button.

7. During a call, you may want to click Mic Mute so the person on the other end does not hear the noise or other conversations in your area.

[Screen for receiving a call]

[Main menu for making a call]

[Call status screen]

① Change between two callers during a call.

[Second caller's status screen]

①

| Phone book |

1. Select ![icon] phone book icon to execute the phone book.

2. Click ![icon] phone connection icon to enter the mode getting the phone book data of the mobile phone.

3. Select the list in your mobile phone book and send it to this device. (Please refer to the manual of the mobile phone).

4. Check the phone book screen if the selected list is transferred in the phone book list of this device.

5. Complete saving the phone book list by clicking the disconnection icon ![icon] or the exit icon.

6. In receiving the phone number saved in the phone book, the saved phone number and person displays on the incoming call screen.

7. To directly make the phone on the phone book list, it can be only achieved in the condition that the phone is disconnected by clicking the disconnection icon, ![icon] and the call button ![icon] is activated.

[Screen for receiving a call]

[Incoming call screen]

0221630738
Adam

[Call waiting screen]

Caution

According to the kinds of the mobile phone, there would be the possibility that the data transfer is not correctly made. In this case, please check the compatibility of mobile phone with this device to visit www.   .com.

MOVIE PLAYER

Click the [Movie Player] icon for the execution.

## | Basic Screen |

ⓐ Playing status	ⓑ Full screen
ⓒ Open a file	ⓓ Play/Pause
ⓔ Stop	ⓕ Play a former file
ⓖ Play a next file	ⓗ Mute
ⓘ Volume down	ⓙ Volume up
ⓚ Enter	ⓛ Cancel

| Open a file |

Open a dialogue window by clicking [Open a file] button and select a movie file to play.
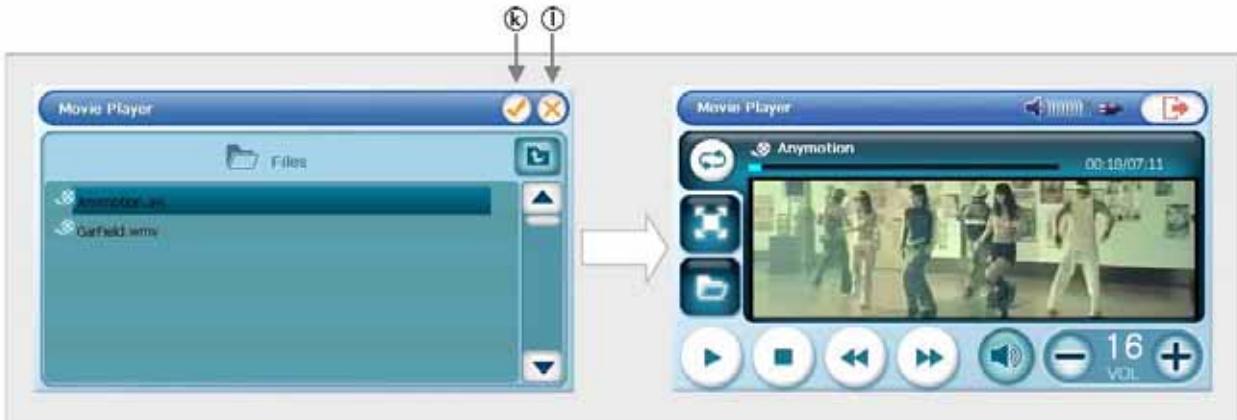
MOVIE PLAYER

| How to use |

1. There are three kinds of playing status like Play [▶]/Pause [❚❚] /Stop [■].

2. Video files on the play list are played one by one in order.

3. Click [⟲] for the repetition.

4. If you click [◀◀] or [▶▶], the existing file stops playing and the former file or the next file plays.

5. Click [⤢] to watch the full screen

6. Click anywhere on the full screen mode to show the control box. To retune to the full screen, please click [✕].

7. Click [✕] on the full screen control box to return the preview screen of Movie file.

ⓐ Play/Pause	ⓑ Stop
ⓒ Play a former file	ⓓ Play a next file
ⓔ Preview screen	ⓕ Close

Caution

1. In the case of the chosen video file could not be played, there would be possibility that video file specification is the upper version that this device cannot support.
   Please check whether the specification of your chosen file in the below category or not.

   Supporting video file spec. : DIVX 3.11/4/5 (640x480 : 1Mbps)

   MPEG1 (640x480 : 1.5Mbps)

   MPEG4/V3 (640x480 : 1Mbps)

   WMV7/8/9 (640x480 1Mbps)

2. In the case of the video file specification is higher one, please convert it into the playable the specification which this device can support with the converting program.

MUSIC PLAYER

Click [MP3 Player] for the execution.

| Screen Layout |

ⓐ Repetition	ⓑ Play list
ⓒ Open a file	ⓓ Play/Pause
ⓔ Stop	ⓕ Play a former file
ⓖ Play a next file	ⓗ Mute
ⓘ Volume down	ⓙ Volume up
ⓚ Add the file(s)	ⓛ Enter
ⓜ Cancel	ⓝ Add all files
ⓞ Delete the file(s)	ⓟ Delete all files

◆ Add the file(s)

1. Click [Open a file] then the below screen appears.
2. Select the file(s) that you want to add in a desired folder.
3. Click [Add the file(s)] icon to add the chosen file(s).
4. Click [Add all files] when you want to add all files in a desired folder.
5. Click [Enter].
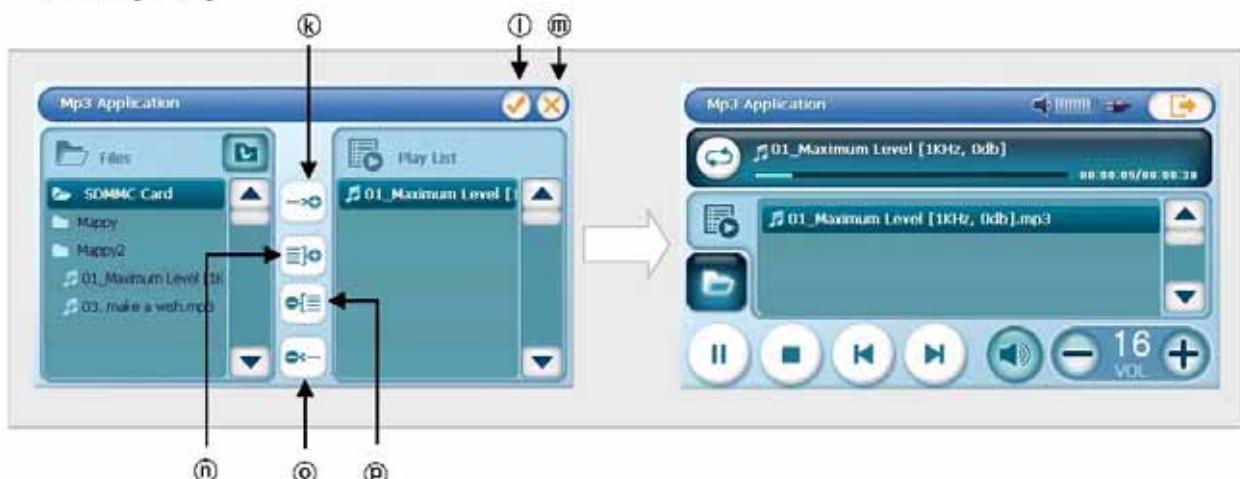
◆ Delete the file(s)

1. Select the file(s) to be deleted in the play list.
2. Click [Delete the file(s)] to delete the chosen file(s).
3. Click [Delete all files] when you want to delete all files on the play list.
4. Click [Enter].

| How to use |

1. There are three kinds of playing status like Play ▶ /Pause ⏸ /Stop ⏹ .

2. Audio files on the play list are played one by one in order.

3. If you click ⏮ or ⏭ , the existing file stops playing and the former file or the next file plays.

4. There are 3 kinds of the play mode. Once playback of the full list 🔁 /Once repetition of one audio file 🔂 /Random 🔀 /Repetition of the full list 🔁 .

Caution

If your chosen audio file is locked with DRM, that audio file cannot be played back in our device.

PHOTO

Click [Photo] for the execution.

| Screen Layout |

ⓐ Zoom In	ⓑ Zoom out
ⓒ Full screen	ⓓ Slide show
ⓔ File list	ⓕ Previous image
ⓖ Next image	ⓗ Preview screen
ⓘ Exit	

[Preview screen]

| How to use |

1. Select one image file on the Image List.
2. For the automatic slide show of all image files, please click 🔲 .
3. Click 🔲 to show the image on the full screen.
4. Click anywhere on the full screen to show the control box.
5. Click ⊗ to return the full screen mode.
6. Click ⊗ to return the preview screen.

[Control box screen]

[Full screen]

CAR MANAGER

Click [Car Manager] on the sub menu of [ETC] to run it.

| Screen Layout |

ⓐ Previous month	ⓑ Next month
ⓒ Refueling records	ⓓ Repair records
ⓔ Statistics	ⓕ Current month
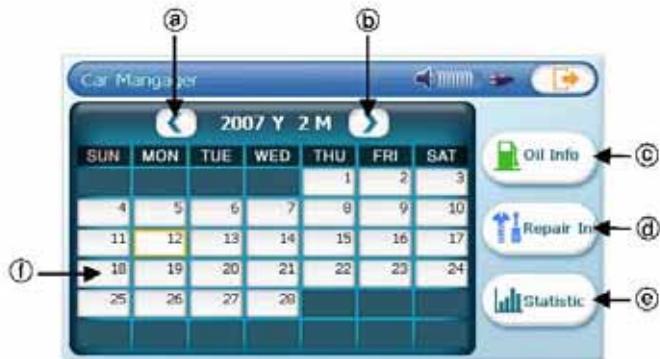
| Oil information |

1. Click [Oil Info] to switch to the Oil information mode.

2. Here, you may input details such as refueling date, cost, oil amount and the current driven mileage (km).

3. Use the keyboard to make the input.

4. Click the [SAVE] button to store your input in memory.

5. Click [Delete] button to delete the oil information on any specific date.

ⓐ Save	ⓑ Delete	ⓒ Date	ⓓ Amount
ⓔ Oil	ⓕ Distance	ⓖ Key board	

| Repair list |

1. Click [Repair] to go to the repair list.

2. Input the date, amount, item and the current mileage of the repair using the number keys.

3. Click the [Save] icon to store your data in the memory.

4. Click [Delete] to delete the data on a specific day.

ⓐ Save	ⓑ Delete	ⓒ Date	ⓓ Amount
ⓔ Item	ⓕ Distance	ⓖ Key board	

| Statistics |

1. Click [Statistics] to switch to statistic mode.

2. Select the year to check.

3. Select the month to check.

4. The screen calculates and shows the Oil status, Total upkeep, Total mileage and so on, which are stored in the selected mm/yy.

ⓐ Year	ⓑ Month	ⓒ Supplied oil	ⓓ Exchange
ⓔ Total mileage/yy	ⓕ Cost of operation	ⓖ Efficiency	ⓗ Previous mm/yy
ⓘ Next mm/yy			

CALCULATOR

Click [Calculator] on [ETC]'s sub menu foe the execution.

| Screen Layout |

There is the general calculation.
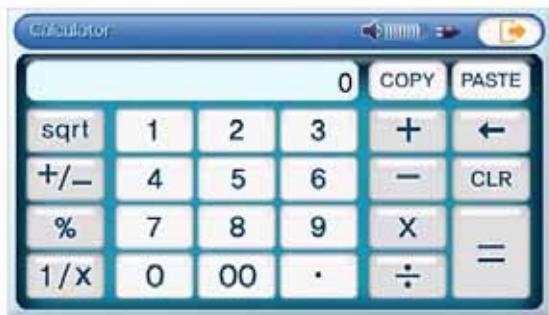
MEMO

Click [Memo] on [Etc]'s sub menu foe the execution.

| Screen Layout |

Using the stylus pen, you can write letters or draw diagrams in the center of the screen on the white board. In the toolbox at the upper side of the screen, you can easily select pen or eraser.

① New file
This icon on the tool box allows you to erase existing files and create a new file for a new drawing

② Drawing
This icon allows you to draw pictures on the screen after changing the input mode into the drawing mode.

③ Eraser
You can partly erase the existing picture.

④ Zoom In / Out
This icon allows you to double the size of picture or return the enlarged picture to its original size.

| Open and Save File |

1. Click on the File menu and select Open.
2. Click on the name of the file you want to open from the dialogue window.

Open a file
Save a file
Save a file in Bitmap format
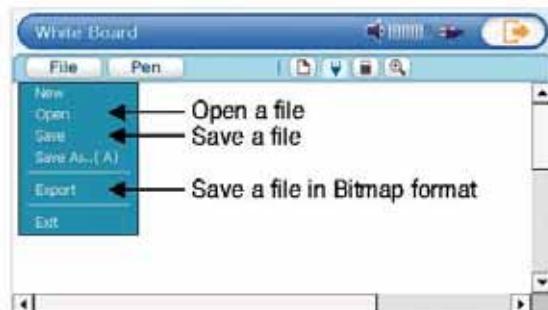
◆ Save File

1. Click on the File menu and select Save.
2. Input the file name and the directory in which you want to save the file.

◆ Save as a Bitmap File

1. Click on the File menu and select Export.
2. Input the directory in which you want to save the file and the Bitmap file name.

| Drawing Configuration |

◆ Changing the Color

1. Click on the Pen menu and select Color.
2. Select the pen color.
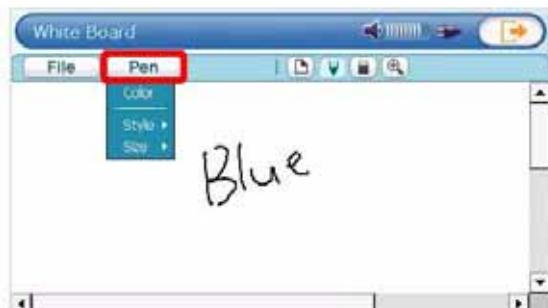
◆ Changing the Pen Pattern and Size

1. To change the pattern of the pen, click on the Pen menu and select Type.
2. To change the size of the pen, after clicking on the Pen menu and Type, select Size.
3. You can also set your own desired size by selecting "User Defined."
4. You can choose Pen pattern with Line and Dot type, but it is available only with a Pen size of 1 px.

Click [Explorer] on [ETC]'s sub menu for the execution.

| Screen Layout |

	@Copy
	Copy a file or a folder.
	ⓑCut
	Cut a file or a folder.
	ⓒPaste
	Paste a cut file or folder.
	ⓓDelete
	Delete a file or a folder.
	ⓔNew folder
	Create a new folder.
	ⓕRename
	Rename a file or a folder.
	ⓖUpper
	Move to the upper folder.
	ⓗBig Icon
	Mark folders or files with big icons.
	ⓘSmall Icon
	Mark folders or files with small icons.
	ⓙDetails
	Mark the information like name, size, format, date of modification, etc.

SETTING

Click [Setting] icon for the execution.

| Brightness |

1. Control the brightness.
2. Adjust the brightness with [UP/DOWN] icon.
3. Click [OK] to complete adjusting the brightness.
4. In case of adjust the brightness under DC power input, please make it in the auto mode.
5. Reset the Brightness setting by clicking [Reset] icon.

| Volume |

1. Control the volume.
2. Adjust the volume with [+/-] icon.
3. Click [OK] to complete adjusting the brightness.
4. Reset the brightness setting by clicking [Reset] icon.

| Power |

1. Set the time of the LCD-off.
2. Find the current battery conditions in [Battery].
3. Control the time to turn off the LCD in [LCD-off].
4. Click [OK] to set the time of LCD-off.
5. Click [Reset] to reset the LCD-off time.
6. LCD-off function is only workable in the battery mode. In the conditions that this device is supplied with the power, the backlight of LCD keeps.

SETTING

| Calibration |

1. Re-calibrate.

2. Adjust the stylus point by clicking [Re-calibration].

3. Click [OK] to complete the calibration.

| FM Transmitter |

1. Set the FM Transmitter .

2. Adjust the frequency with [+/-] buttons.

3. Set the Enabling or the Disabling. In the condition of the Enabling, both speaker and earphone audio out are disabled.

3. Click [OK] to complete operating the FM transmitter.

| Language Selection |

1. Select one language to operate this device.

2. Click [OK] to complete selecting the language.

| Connecting PC |

1. You can copy or delete the map software, the movie file, audio file, image file and so on in SD card or Nand Flash through USB.

2. Please connect the device with the USB port of PC.

3. PC recognizes this device and you can see the mobile disk in the file explorer of PC as follows.


```
Devices with Removable Storage

   DVD-RAM Drive (E:)        Removable Disk (F:)
```
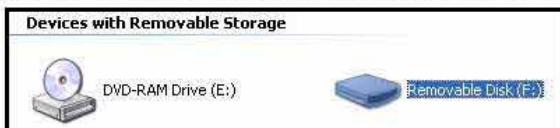
4. Copy your chosen data to the mobile dist or the PC

Caution

- Don't depart the device from PC in transferring data. It causes the damage in data.

- There might be the possibility that data could be damaged or this device could not be recognized as the mobile disk in accordance with the kinds of PC.

| Disconnecting PC |

1. When transferring Data is completed, click the "Safety hardware disconnection" at the lower of right side.

2. When the Safety hardware disconnection is done, depart this device from the PC.

Caution

In some case you depart this device from PC without the Safety hardware disconnection, it might cause the damage in the data or this device.

TROUBLESHOOTING

Problem	Checking
Does not charge	• Check whether the power adaptor is firmly connected. • Check if the battery is already fully charged. • Check if the battery button is off.
The device does not work with cigar jack adaptor	• Sometimes your vehicle's battery voltage drops below the level required by the device to function properly. When this happens, please resolve the power supply issue for your vehicle first.
Buttons do not work	• Please check if the device is discharged. • Please check the HOLD switch.
Overheating	• The device may overheat when in use for a long stretch of time.
The total running time is different from what the manual indicates	• Please check whether the battery was fully charged prior to use. • The total running-time of the device may decrease depending on how many functions are used simultaneously. • Please check whether the battery life is worn.
No power	• Please check the charging status.
Product stops functioning in the middle of an operation	• The device may cease to function when buttons are pressed excessively or when the device attempts to play unsupported/illegal data. Please press the RESET button in the lower side of the device and erase the data from the device.
No sound coming from the speaker	• Please check whether the earphone is plugged-in to the device. The speaker does not produce sound when an earphone is plugged-in to the device.
Player ceases to function after a device update	• Please do not remove the USB cable too forcefully after completely downloading the upgrade files. • Please try reinstalling the upgrade files.
The speaker produces noise or improper sound	• Please check whether the Pause button was pressed while audio was playing or whether the device in MUTE mode. • Please check whether the earphone cable is properly plugged-in to the device.

TROUBLESHOOTING

Problem	Checking
The display monitor turns off while the device is in operation	• Please check whether the Backlight OFF mode is selected.
LCD is too dark, making it difficult to see the display monitor	• Please check whether the brightness level is properly adjusted under device setting.
Can not play the converted file throug the transcoder program	• Please check whether converting is normally made or not. • Please delete the converted file and retry to convert the file and play it.
Device fails to recognize the USB connection	• Please check whether the USB driver has been installed. • If the device still fails to recognize the USB connection after the driver has been installed, please reinstall the driver and reboot the PC.
Location tracker does not work	• After boot-up, it may take from 30 seconds to 5 minutes for the device to track down the vehicle location according to the vehicle's parking or stop location. • When the device is used for the first time or used after the vehicle had been parked for a long period of time, it may take 5–30 minutes for the device to function properly depending on the level of supplied power and system inspection time.
Display map stops moving when vehicle is inside a tunnels or running on underground roads	• The display map cannot move when you are in locations where satellite communication is impossible, including tunnels and underground roads. Please transfer to a location where satellite communication is supported.
Poor GPS reception	• Sun coating (especially the ones with metallic substances) and other materials may interfere with GPS satellite waves. Inclement weather may also prevent the GPS device to receive data from the satellite.
Abnormal touch screen function	• Readjust the stylus point by clicking on recalibrate.

GENERAL	Model Name	N4600
	Frequency range	88.1MHz~107.9MHz, 2402~2480MHz
	Weight	230 g
	OS	WIN CE 5.0 Core
	File System	FAT32
	Language	
	Operation	Touch screen, Buttons on the front & the sides
	Display	4.3" Wide TFT LCD, 16DM True color's 480 x 272 Resolution, Brightness : 500cd/m2
	Interface	USB 2.0 SLAVE
	SDIO Card	External SD Slot (up to 4GB)
	Memory	Nand 2GB / 64MB (mDDR-RAM)
	Input	DC5.0V, 2A
	Battery	Lithium Ion Voltage : 3.7V Charging time : 4 hours (totally being discharged status) Capacity : 2,000mA
	Battery time	GPS : About 3 hours (In Middle standard of the brightness and volume) Video : About 5 hours (In the standard of Divx5/320x240/500Kbps, B/R VOL middle level, earphone output
	Multi tasking	MP3 + Navigation MP3 + Photo view MP3 + Extra functions
ENVIRONMENT	Performance	Operating temperature 0~50℃
		Storage temperature -10~60℃
	PC	Pentium III 500 MHz or better Microsoft Windows 2000/XP More than 128 MB memory USB Port 2.0 Over spare 4GB HDD CD-ROM Drive Over SVGA monitor
NAVIGATION	GPS	SiRF Star III / Intenna active type

SPECIFICATION

BLUETOOTH	Specification	Version 2.0
	Class	Class I
	Profile	A2DP (Audio Streaming), AVRCP (Remote Control), SPP (Serial Port Profile)
	Receiver Sensity	-87dBm(typ.)
	Transmitter Power	0 dBm(typ.)
VIDEO	Sub-title	SMI
	Video Codec	DIVX/XviD (Sample Profile), MPEG1, MS-MPEG4 v3, WMV, M-JPEG
	Video File format	AVI ,WMV ,MPG ,MPEG ,MP4 ,DIVX
	Support file	DIVX 3.11/4/5 (640x480 : 1Mbps) MPEG1 (640x480 : 1.5Mbps) MPEG4/V3 (640x480 : 1Mbps) WMV7/8/9 (640x480 1Mbps)
	Frame	30 frames per second (25fps recommended)
AUDIO	Audio Codec	MPEG Audio(LibMad), Vorbis Audio(Tremor), AC-3 (LibA52), AAC (LibFAAD), ADPCM
	Audio File format	MP3 , WMA , WAV , OGG (up to Q10)
	Channel	Stereo
	Frequency range	20Hz ~ 20KHz
	Headphone Output	Left 20 mW + Right 20 mW
	Speaker Output	0.7W x 2
	SNR	Over -90dB
PHOTO	Support file	JPEG, BMP
		5000x5000 resolution recommended (JPEG), BMP 1600x1200 at Maximum
EXTRA FUNCTIONS	Car diary	Oil information / Mending list / Statistics
	Memo	White board
	Calculator	Calculator
	Explorer	File sort / Delete / Copy / Paste / Create folder
FM Frequency range: 88.1MHz~107.9 MHz		

FCC compliance Information
This device complies with part 15 of 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.

Information to User
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.

FCC WARNING:
This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.