

ATTACHMENT H.

- Hardware Manual -





1. FM Selection Button

Turns to FM mode and toggles FM1and FM2 when the button is pressed each time.

2. AM Selection Button

Pressing the [AM] button selects the AM band. AM Mode is displayed on the LCD.

3. Automatic Channel Selection Button

- When the [SEEK] button is pressed, it increases the band frequency by 200khz to automatically select channel. Stops at the previous frequency if no channel is found.
- When the [TRACK V] button is pressed, it reduces the band frequency by 200khz to automatically select channel. Stops at the previous frequency if no channel is found.

4. Power ON/OFF&Volume Control Button

Turns on/off the set when the IGNITION SWITH is on ACC or ON. If the button is turned to the right, it increases the volume and left,decreases the volume.

5. CD/AUX Selection Button

If there is a cd in the CDP DECK it turns to CD mode, and if a device is connected to AUX then it toggles.

CD-+AUX-+CD... when the button is pressed each time.(It will not turn to AUX if the auxiliary device is not connected)

6. SCAN Button

If this button is pressed, the frequencies will become increased and receive the corresponding broadcasts. This function will play the frequencies for 5 seconds (XM MODE:10 seconds) each and find other broadcasts as the frequency increases. Press the button again when desiring to continue listening to the currently playing broadcast.

7. SETUP Button

Press this button to turn to the SIRIUS option,TEXT SCROLL and adjustment mode. If no action is taken for 5 seconds after pressing the button, it will return to theplay mode.(After entering SETUP mode, move between items using the left, right and PUSH functions of the TUNE button.) The setup item changes from CLOCK↔SCROLL ↔SAT ↔P.BASS ↔TEMP ↔BT ↔SDVC↔···

8. TUNE/ENTER Knob

Turn this button clockwise by one notch to increase frequency by 200khz from current frequency. Turn this button counterclockwise by one notch to decrease frequency by 200khz from current frequency.

- Press this button while holding SETUP button to activate/inactivate the item to select SETUP item using left and right function of the Tune button.
- Pressing the button changes the BASS, MIDDLE, TREBLE, FADER and BALANCE TUNE mode. The mode selected is shown on the display. After selecting each mode, rotate the Audio control knob clockwise or counterclockwise.

BASS Control

To increase the BASS, rotate the knob clockwise, while to decrease the BASS, rotate the knob counterclockwise.

MIDDLE Control

To increase the MIDDLE, rotate the knob clockwise, while to decrease the MID-DLE, rotate the knob counterclockwise.

TREBLE Control

To increase the TREBLE, rotate the knob clockwise, while to decrease the TRE-BLE, rotate the knob counterclockwise.

FADER Control

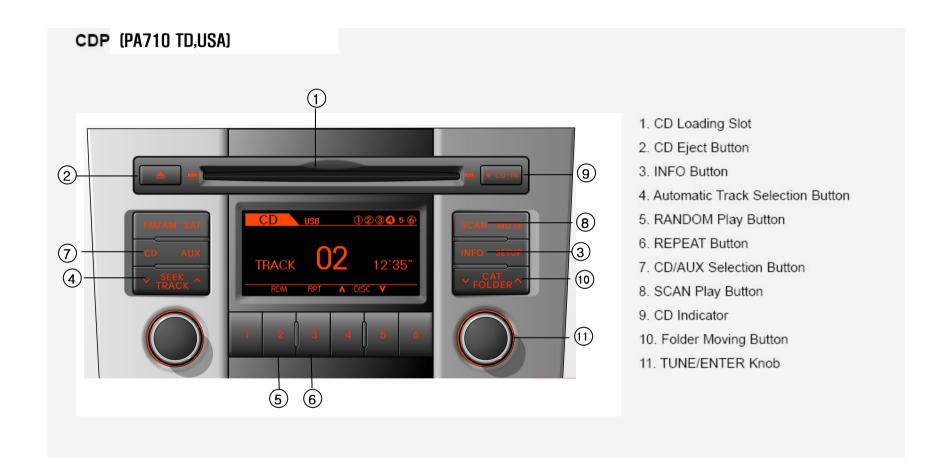
Turn the control knob clockwise to emphasize rear speaker sound(front speaker sound will be attenuated). When the control knob is turned counterclockwise, front speaker sound will be emphasized(rear speaker sound will be attenuated).

BALANCE Control

Rotate the knob clockwise to emphasize right speaker sound(left speaker sound will be attenuated). When the control knob is turned counter clockwise, left speaker sound will be emphasized(right speaker sound will be attenuated).

9. Preset Button

Push [1]~[6] buttons less than 0.8 second to play the channel saved in each button. Push Preset button for 0.8 second or longer to save current channel to the respective button with a beep.



CDC (PA760 TD,USA)



- 1. CD Loading Slot
- 2. CD Eject Button
- 3. INFO Button
- 4. Automatic Track Selection Button
- 5. RANDOM Play Button
- 6. REPEAT Button
- 7. CD/AUX Selection Button
- 8. SCAN Play Button
- 9. CD LOAD Button
- 10. Folder Moving Button
- 11.TUNE/ENTER Knob
- 12. DISC Selection Button

1. CD Loading Slot

Please face printed side upward and gently push in. When the ignition switch is on ACC or ON and power is off, power is automatically turned on if the CD is loaded. This CDP supports only 12cm CD. If VCD, Data CD are loaded, "Reading Error" message will appear and CD will be ejected.

2. CD Eject Button

Push ▲ button to eject the CD during CD playback. This button is enabled when ignition switch is off.

3. INFO Button

Displays the information of the current CD TRACK in the order of DISC TITLE →DISC ARTIST → TRACK TITLE → TRACK ARTIST → TOTAL TRACK → Play Screen → DISC TITLE → ... (not displayed if the information is not available on the DISC.)

4. Automatic Track Selection Button

 Push [TRACK V] button for less than 0.8 second to play from the beginning of current song.

- Push [TRACK V] button for less than 0.8 second and press again within 1 seconds to play the previous song.
- Push [TRACK V] button for 0.8 or longer to initiate reverse direction high speed sound search of current song.
- Push [SEEK] button for less than 0.8 second to play the next song.
- Push [SEEK] button for 0.8 or longer to initiate high speed sound search of current song.

5. RANDOM Play Button

Turns on/off the randomization of the play list of files in the currently played DISC. To cancel the mode, press the button once again.

6. REPEAT Button

Repeats current song when the button is pressed for less than 0.8 second. Repeats the entire DISC when the button is pressed for 0.8 second or longer.

7. CD/AUX Selection Button

If the auxiliary device is connected, it turns to AUX MODE to play the sound from the auxiliary player.

If no Disc and auxiliary device is connected, it displays "NO Media" for 5 seconds and returns to the previous mode.

8. SCAN Play Button

Plays first 10 seconds of each song in the DISC. To cancel the mode, press the button once again.

9. CD Indicator

When car ignition switch is ACC or ON and if the CD is loaded, this indicator is lighted. If the CD is ejected the light is turned off.

10. Folder Moving Button

 Moves [FOLDER V] button child folder er of the current folder and displays the first song in the folder. Press TUNE/ ENTER knob to move to the folder displayed. It will play the first song in the folder.

 Moves [CAT \] button parent folder and displays the first song in the folder. Press TUNE/ENTER knob to move to the folder displayed

11. TUNE/ENTER Knob

Turn this button clockwise to display songs after current song. Also, turn this button counterclockwise to display songs before current song. To listen to the displayed song, press the button to skip to the song and play.

Pressing the button changes the BASS, MIDDLE, TREBLE, FADER and BAL-ANCE TUNE mode. The mode selected is shown on the display. After selecting each mode, rotate the Audio control knob clockwise or counterclockwise.

BASS Control

To increase the BASS, rotate the knob clockwise, while to decrease the BASS, rotate the knob counterclockwise.

MIDDLE Control

To increase the MIDDLE, rotate the knob clockwise, while to decrease the MID-DLE, rotate the knob counterclockwise.

TREBLE Control

To increase the TREBLE, rotate the knob clockwise, while to decrease the TRE-BLE, rotate the knob counterclockwise.

FADER Control

Turn the control knob clockwise to emphasize rear speaker sound(front speaker sound will be attenuated). When the control knob is turned counterclockwise, front speaker sound will be emphasized(rear speaker sound will be attenuated).

BALANCE Control

Rotate the knob clockwise to emphasize right speaker sound(left speaker sound will be attenuated). When the control knob is turned counter clockwise, left speaker sound will be emphasized(right speaker sound will be attenuated).

12. DISC Selection Button

- [DISC ∨] Change Button Changes disc to the previous disc.
- [DISC] Change Button Changes disc to the next disc.

A CAUTION IN USING USB DEVICE

- To use the external USB device, make sure the device is not mounted when starting up the vehicle and mount the device after starting up.
- If you start the vehicle when the USB device is mounted, it may damage the USB device. (USB is not ESA)
- If the vehicle is started up or turned off while the external USB device is connected, the external USB device may not work.
- It may not play inauthentic MP3 or WMA files.
 - It can only play MP3 files with the compression rate between 8Kbps~320Kbps.
 - It can only play WMA music files with the compression rate between 8Kbps~320Kbps.
- Take cautions for static electricity when mounting or dismounting the external USB device.
- Encoded MP3 PLAYER is not recognizable.

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- Depending on the condition of the external USB device, the connected external USB device can be unrecognizable.
- When the formatted byte/sector setting of External USB devices is not either 512BYTE or 2048BYTE, then the device will not be recognized.
- Only the USB device formatted to FAT 12/16/32.
- USB device without USB IF authentication may not be recognizable.
- Make sure the USB connection terminal does not come in contact with human body or any object.
- If you repeat mounting or dismounting USB device in a short period of time, it may break the device.
- You might hear strange noise when mounting or dismounting a USB device.

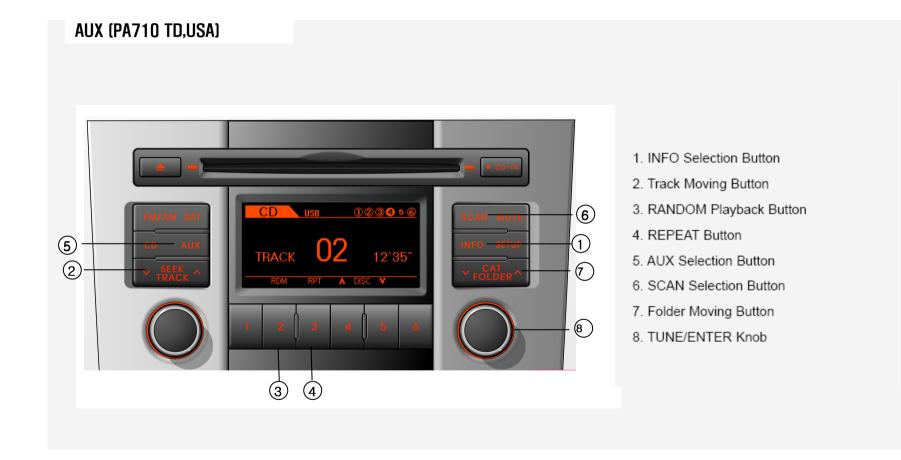
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- If you dismount the external USB device during playback in USB mode, the external USB device can be damaged or malfunction. Therefore, mount the external USB device when the engine is turned off or in another mode.
- Depending on the type and capacity of the external USB device or the type of the files stored in the device, there is a difference in the time taken for recognition of the device, but this is not a trouble Please wait for a moment.
- Do not use the USB device for other purposes than playing music files.
- Use of USB accessories such as the recharger or heater using USB I/F may lower the performance or cause trouble.
- If you use devices such as the USB hub you purchased separately, the vehicle's audio system may not recognize the USB device. Connect the USB device directly to the multimedia terminal of the vehicle.

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AUX (PA760 TD,USA)



- 1. INFO Selection Button
- 2. Track Moving Button
- 3. RANDOM Playback Button
- 4. REPEAT Button
- 5. AUX Selection Button
- 6. SCAN Selection Button
- 7. Folder Moving Button
- 8. TUNE/ENTER Knob

1. INFO Selection Button

Displays the information of the file currently played in the order of FILE NAME ••TITLE•••ARTIST••ALBUM••FOLDER•• TOTAL FILE••NORMAL DISPLAY••FILE NAME•••... (Displays no information if the file has no song information.)

2. Track Moving Button

- Press the [TRACK V] button for less than 0.8 second to play from the beginning of the song currently played. Press the button for less than 0.8 second and press it again within 1 seconds to move and play the previous track. Press the button for 0.8 second or longer to play the song in reverse direction in fast speed.
- Press the [SEEK] button for less than 0.8 second to move to the nexttrack. Press the button for 0.8 second or longer to play the song in forward direction in fast speed.

3. RANDOM Playback Button

Press the button for less than 0.8 second to start or stop the random playback of the songs in the current folder.

Press the button for more than 0.8 second to randomly play the entire songs in the USB device. Press the button again to cancel the mode.

4. REPEAT Button

Press the button for less than 0.8 second to repeat the song currently played. Press the button for more than 0.8 second to repeat the entire songs in the USB device.

5. AUX Selection Button

If USB is connected, it switches to the USB mode from the CD mode to play the song files stored in the USB. If there are no CD and USB mode from the Radio mode, it displays "NO Media".

6. SCAN Selection Button

Plays 10 seconds of each song in the USB device. Press the button once again to cancel scanning.

7. Folder Moving Button

- Moves [FOLDER V] button child folder er of the current folder and displays the first song in the folder. Press TUNE/ ENTER knob to move to the folder displayed. It will play the first song in the folder.
- Moves [CAT] button parent folder and displays the first song in the folder. Press TUNE/ENTER knob to move to the folder displayed

8. TUNE/ENTER Knob

Turn this button clockwise to display the songs next to the currently played song. Turn the button counterclockwise to display the songs before the currently played song.

- Press the button to skip and play the selected song.
- Pressing the button changes the BASS, MIDDLE, TREBLE, FADER and BALANCE TUNE mode. The mode selected is shown on the display. After selecting each mode, rotate the Audio control knob clockwise or counterclockwise.

BASS Control

To increase the BASS, rotate the knob clockwise, while to decrease the BASS, rotate the knob counterclockwise.

MIDDLE Control

To increase the MIDDLE, rotate the knob clockwise, while to decrease the MID-DLE, rotate the knob counterclockwise.

TREBLE Control

To increase the TREBLE, rotate the knob clockwise, while to decrease the TRE-BLE, rotate the knob counterclockwise.

FADER Control

Turn the control knob clockwise to emphasize rear speaker sound(front speaker sound will be attenuated). When the control knob is turned counterclockwise, front speaker sound will be emphasized(rear speaker sound will be attenuated).

BALANCE Control

Rotate the knob clockwise to emphasize right speaker sound(left speaker sound will be attenuated). When the control knob is turned counter clockwise, left speaker sound will be emphasized(right speaker sound will be attenuated).

RUNNING IPOD(PA710 TD,USA)



- 1. INFO Selection Button
- 2. Track Moving Button
- 3. RANDOM Playback Button
- 4. REPEAT Button
- 5. iPod Selection Button
- 6. TUNE/ENTER Knob
- 7. Category Selection Button

RUNNING IPOD(PA760 TD,USA)



- 1. INFO Selection Button
- 2. Track Moving Button
- 3. RANDOM Playback Button
- 4. REPEAT Button
- 5. iPod Selection Button
- 6. TUNE/ENTER Knob
- 7. Category Selection Button



1. INFO Selection Button

Displays the information of the file currently played in the order of TITLE→ ARTIST→ALBUM→NORMAL DISPLAY→ TITLE→... (Displays no information if the file has no song information.)

2. Track Moving Button

- Press the [SEEK] button for less than 0.8 second to play from the beginning of the song currently played. Press the button for less than 0.8 second and press it again within 1 seconds to move and play the previous track. Press the button for 0.8 second or longer to play the song in reverse direction in fast speed.
- Press the [TRACK V] button for less than 0.8 second to move to the next track. Press the button for 0.8 second or longer to play the song in forward direction in fast speed.

3. RANDOM Playback Button

Press the button for less than 0.8 second to activate or deactivate the random playback of the songs within the current category. Press the button for longer than 0.8 second to randomly play all songs in the entire album of the iPod. Press the button once again to cancel the mode.

4. REPEAT Button

Repeats the song currently played.

5. iPod Selection Button

If iPod is connected, it switches to the iPod mode from the CD mode to play the song files stored in the iPod. If there are no CD and AUX mode from the Radio mode, it displays "NO Media".

6. TUNE/ENTER Knob

When you turn the button clockwise, it will display the songs(category) next to the song currently played(category in the same level). Also, when you turn the button counterclockwise, it will display the songs(category) before the song currently played(category in the same level).

If you want to listen to the song displayed in the song category, press the button, then it will skip to the selected song and play.

Pressing the button changes the BASS, MIDDLE, TREBLE, FADER and BAL-ANCE TUNE mode. The mode selected is shown on the display. After selecting each mode, rotate the Audio control knob clockwise or counterclockwise.

BASS Control

To increase the BASS, rotate the knob clockwise, while to decrease the BASS, rotate the knob counterclockwise.

MIDDLE Control

To increase the MIDDLE, rotate the knob clockwise, while to decrease the MID-DLE, rotate the knob counterclockwise.'

TREBLE Control

To increase the TREBLE, rotate the knob clockwise, while to decrease the TRE-BLE, rotate the knob counterclockwise.

FADER Control

Turn the control knob clockwise to emphasize rear speaker sound(front speaker sound will be attenuated). When the control knob is turned counterclockwise, front speaker sound will be emphasized(rear speaker sound will be attenuated).

BALANCE Control

Rotate the knob clockwise to emphasize right speaker sound(left speaker sound will be attenuated). When the control knob is turned counter clockwise, left speaker sound will be emphasized(right speaker sound will be attenuated).

7. Category Selection Button

Moves to the upper category from currentlyplayed category of the iPod. To move to(play) the category(song) displayed, MENU(preset3) You will be able to search through the lower category of the selected category. The order of iPod's category is SONG, ALBUMES, ARTISTS, GENRES, and iPod.

* NOTICE FOR USING iPod DEVICE

- Some iPod models might not support the communication protocol and the files will not be played. (iPod models supported: Mini, 4G, Photo, Nano, 5G)
- The order of search or playback of songs in the iPod can be different from the order searched in the audio system.
- If the iPod crashes due to its own trouble, reset iPod. (Reset: Refer to iPod manual)
- iPod may not operate normally on low battery.

A CAUTION IN USING iPod DEVICE

- You need the power cable exclusive for iPod in order to operate iPod with the buttons on the audio system. The PC cable provided by Apple may cause malfunction and do not use it for vehicle use.
- When connecting the device with iPod cable, push in the jack fully not to interfere with communication.
- When adjusting the sound effects of iPod and the audio system, the sound effects of both devices will overlap each and might cause reduce or distort the quality of the sound.
- Deactivate (turn off) the equalizer function of iPod when adjusting the audio system's volume, and turn off the equalizer of the audio system when using the equalizer of iPod.

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 When the iPod cable is connected, the system can be switched to the AUX mode even without the iPod device and can cause noise. Disconnect iPod cable when you are not using the iPod device.

SIRIUS MODE (PA710 TD,USA)

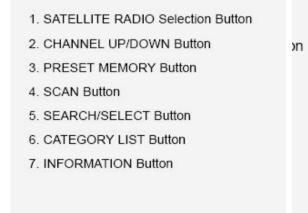


1. SATELLITE RADIO Selection Button

- 2. CHANNEL UP/DOWN Button
- 3. PRESET MEMORY Button
- 4. SCAN Button
- 5. SEARCH/SELECT Button
- 6. CATEGORY LIST Button
- 7. INFORMATION Button

SIRIUS MODE (PA760 TD,USA)





How to Activate SIRIUS SATELLITE RADIO

Your vehicle will have access to over 130 satellite channels of music, information, and entertainment programming.

Activation

In order to activate the satellite radio, you will need to call the satellite radio service provider and give them a twelve digit electronic serial number(ESN.) The number is located on a special diagnostic screen of the radio.

To find this number, follow this procedure, rotate the tune knob to channel zero. Call Sirius Customer Care at 1-888-539-SIRIUS(7474) to activate your radio.

Please note that the radio will need to be on, tuned to station 184, and located outside in order for the activation signal to be received.

1. SATELLITE RADIO Selection Button

Turns to SATELINT RADIO mode, and toggles as below when the button is pressed each time.

SAT1⇔SAT2→SAT3→SAT1→...

2. CHANNEL UP/DOWN Button

- Press [TRACK ∨] or [SEEK ∧] button for less than 0.8 seconds to select previous or next channel.
- Press [TRACK] or [SEEK] button for 0.8 or longer to continuously move to previous or next channel.
- if "Category" Icon is displayed at the top of the screen, channel up/down is done through the channels within current category.

3. PRESET MEMORY Button

- Press [1]~[6] buttons less than 0.8 seconds to play the station saved in each button.
- Press [1]~[6] button for 0.8 seconds or longer to save current station to the respective button with a beep.

4. SCAN Button

- When [SCAN] button is pressed, channel is changed and the next channel is received automatically.
- This function will play the channel for 10 seconds each and find other channels as the channel number increases.

- Press the button again when desiring to continue listening to the currently plaing broadcast.
- if "Category" Icon is displayed at the top of the screen, channel changing is done through the channels in current category.

5. SEARCH/SELECT Button

- Rotate clockwise to increase the channel number or to down the list.
- Rotate counterclockwise to decrease the channel number or to up the list.
- Press this button to make selection of channels or items.

6. CATEGORY LIST Button

- Press [CAT \] or [FOLDER \] button to enter the CATEGORY LIST Mode, it displays cateogry items and highlights the category that currently tuned channel belongs to.
- On Category List Mode, press these buttons to navigate category list.
- Press SELECT Button to select the lowest channel in highlighted category.
- If channel is selected by selecting category "Category" lcon is displayed at the top of the screen.

7. INFORMATION Button

Displays the information of the current channel as below when the button is pressed each time.

 when default display is Category/Channel

Category/Channel-→Artist/Title-→Compo ser (ifavailable)-→Category/Channel-→...

 when default display is Artist/Title Artist/Title→Category/Channel→ Composer(if available)→Artist/Title→...



BLUETOOTH PHONE PAIRING (non-navigation equipped models only)

Pairing your phone

Follow these steps to connect your Bluetooth cell phone to BlueConnect.

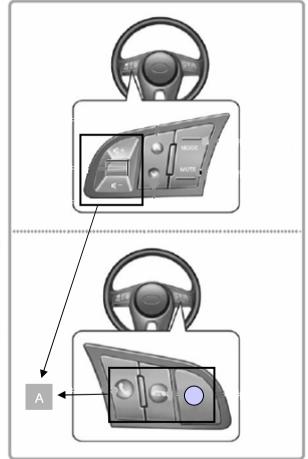
NOTE: Do not connect while driving.

- Then say "SET UP".
- = Say "PHONE PAIRING".
- Say "PAIR A PHONE".
- Say "CONTINUE".
- Say a 4 digit pin code ex. (1, 2, 3, 4).
- Start pairing to your cell phone to Bluetooth and select the same PIN code on your phone as you did for the BlueConnect (Make sure your Bluetooth is "ON" on your cell phone before pairing).
- Once pairing is complete BlueConnect will ask what priority you would like your phone, pick priority 1 through 7.

Dialing a number

- Press the Phone button
- = Then say "Dial".

Receiving incoming call



15.247(a)(1) The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

15.247(g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

15.247(h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC RF Radiation Exposure Statement:

 This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.