## ATTACHMENT E.

- User Manual -


## RADIO, SET UP, VOLUME CONTROL (PA710BH)



## 1. FM/AM Selection Button

Turns to FM or AM mode, and toggles in the order of $\mathrm{FM} 1 \rightarrow \mathrm{FM} 2 \rightarrow \mathrm{AM} \rightarrow \mathrm{FM} 1 \ldots$ when the button is pressed each time.

## 2. Power ON/OFF \& Volume Control Button

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

## 3. Automatic Channel Selection Button

- When the $[S E E K \vee$ ] button is pressed, it reduces the band frequency to automatically select a channel. Stops at the previous frequency if no channel is found.
- When the [SEEK $\wedge$ ] button is pressed, it increases the band frequency to automatically select a channel. Stops at the previous frequency if no channel is found.


## 4. Preset Button

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

## 5. DISPLAY (Screen ON/OFF Button)

Turns the displayed data and light on/off on the LCD.

## 6. TUNE/SETUP Button

When you rotate to clockwise or counterclockwise, the frequency increases or decreases by each step.
General(AM 9kHz, FM 100kHz), USA (AM 10kHz, FM 200kHz)
When you press this button, enter the SETUP mode. If no action is taken for 5 seconds after pressing the button, it will return to the play mode. (After entering SETUP mode, move between items using the left, right and push functions of the TUNE/SETUP button.)

## 7. SCAN Button

Press to hear a brief sampling of all stations on the frequency band. When you press this button again at this moment, you can receive the broadcasting that you choose.

## CD (PA710BH)



1. RANDOM Play Button
2. REPEAT Button
3. CD/AUX Selection Button
4. Automatic Track Selection Button
5. SCAN Play Button
6. CD Eject Button
7. TUNE/SETUP Button
8. INFO Button
9. Folder Search Button
10. CD Indicator
11. CD loading slot

## 1. 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.

## 2. REPEAT Button

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

## 3. CD/AUX Selection Button

Turns to CD mode.

## 4. Automatic Track Selection Button

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


## 5. SCAN Play Button

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

## 6. CD eject Button

Push $\boldsymbol{\Delta}$ button to eject the CD during CD playback. This button is enabled when ignition switch is off.

## 7. TUNE/SETUP Button

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.

## 8. INFO Button

Displays the information of the current CD TRACK (or FILE) in the order of DISC TITLE $\rightarrow$ DISC ARTIST $\rightarrow$ TRACK TITLE $\rightarrow$ TRACK ARTIST $\rightarrow$ TOTAL $\rightarrow$ Play Screen $\rightarrow$ DISC TITLE... when the button is pressed each time.

## 9. Folder Search Button

- Push [FOLDER $V$ ] button child folder of the current folder and display the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
- Push [FOLDER $\wedge$ ] button parent folder and displays the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
(MP3 only)


## 10. CD Indicator

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

## 11. 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 12 cm CDs. But if a VCD, Data CD, or DVD are loaded, "Media Error" message will appear.

## A. CAUTION IN USING USB DEVICE

- To use an 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.

1) It can only play MP3 files with the compression rate between 8 Kbps~320Kbps.
2) It can only play WMA music files with the compression rate between 8 Kbps~320Kbps.

- Take cautions for static electricity when mounting or dismounting the external USB device.
- An encoded MP3 PLAYER is not recognizable.
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## (Continued)

- 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.
- Use only a USB device formatted to FAT 12/16/32.
- USB devices without USB IF authentication may not be recognizable.
- Make sure the USB connection terminal does not come in contact with a 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 a strange noise when mounting or dismounting a USB device.
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## (Continued)

- 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 an indicator of trouble and you only have to wait.
- Do not use the USB device for other purposes than playing music files.
- Use of USB accessories such as a recharger or heater using USB I/F may lower performance or cause trouble.
- If you use devices such as a 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.


## USING USB (PA710BH)



Using a USB that is connected to the multiple terminal inside the console on the right hand side of the driver's seat.

## 1. RANDOM Play Button

Turns on/off the randomization of the play list of files in the currently played folder. Press the button for more than 0.8 seconds to randomly play the entire songs in the USB device. To cancel the mode, press the button once again.

## 2. REPEAT Button

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

## 3. CD/AUX Selection Button

If USB device is connected, it switches to the USB mode from CD mode to play the song files stored in the USB.
If the auxiliary device is connected, it turns to AUX mode to play the sound from the auxiliary player.

## 4. Automatic Track Selection Button

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


## 5. SCAN Play Button

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

## 6. TUNE/SETUP Button

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

## 7. INFO Button

Displays the information of the file currently played in order of FILE - TITLE $\rightarrow$ ARTIST $\rightarrow$ ALBUM $\rightarrow$ FOLDER $\rightarrow$ TOTAL $\rightarrow$ Play Screen $\rightarrow$ FILE... when the button is pressed each time.

## 8. Folder Search Button

- Push [FOLDER V] button sub folder of the current folder and display the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
- Push [FOLDER $\wedge$ ] button main folder and displays the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
(MP3 only)


## RUNNING iPod ${ }^{\circledR}$ (PA710BH)



Using un iPod when the exclusive cable is connected to the multiple terminal inside the console on the right hand side of the driver's seat.

## 1. RANDOM Playback Button

Press the button for less than $0.8 \mathrm{sec}-$ onds to activate or deactivate the random playback of the songs within the current category. Press the button for longer than 0.8 seconds to randomly play all songs in the entire album of the iPod. Press the button once again to cancel the mode.

## 2. REPEAT Button

Repeats the song currently played.

## 3. CD/AUX Selection Button

If an iPod is connected, it switches to the iPod mode to play the song files stored in the iPod.

## 4. Automatic Track Selection Button

- Push [SEEK $\vee$ ] button for less than 0.8 seconds to play from the beginning of the current song.
- Push [SEEK $V$ ] button for less than 0.8 seconds and press again within 1 seconds to play the previous song.
- Push [SEEK $V$ ] button for $0.8 \mathrm{sec}-$ onds or longer to initiate reverse direction high speed sound search of current song.
- Push [SEEK $\wedge$ ] button for less than 0.8 seconds to play the next song.
- Push [SEEK $\wedge$ ] button for 0.8 seconds or longer to initiate high speed sound search of current song.


## 5. Category Selection Button

Press [CAT FOLDER $\wedge / \vee$ ] button to move the category and display the first song in the category. Press [ENTER] button to move to the category displayed. It will play the first song in the folder. (PLAYLISTS $\rightarrow$ ARTISTS $=\rightarrow$ ALBUMS $=$ GEN RES $\rightarrow$ SONGS $" \rightarrow$ COMPOSERS $\rightarrow$ PLAYLISTS $-\cdots$...)

## 6. TUNE/SETUP Button

Turn this button clockwise or counterclockwise, it will display the category menu. To select the displayed menu, press the button.

## 7. INFO Button

Displays the information of the file currently played in order of TITLE $\rightarrow$ ARTIST $\rightarrow$ ALBUM $\rightarrow$ Play Screen $\rightarrow$ TITLE...

## * 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 the iPod. (Reset: Refer to iPod manual)
- An iPod may not operate normally on low battery.


## A. CAUTION IN USING iPod DEVICE

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

- 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.
- When the iPod is not used for the audio system, the iPod cable has to be separate from the iPod device. Origin display of iPod may not be displayed.


## XM Satellite Radio (PA710BH)



## 1. XM Selection Button

Turns to XM Satellite Radio Mode.
XM mode toggles in order to XM1 $\rightarrow$ XM2 $\rightarrow$ XM3 $\rightarrow$ XM1 $\ldots$ when the button is pressed each time.

## 2. Automatic Channel Selection Button

- Push [SEEK $\vee$ ] button for less than 0.8 seconds to select previous channel.
- Push [SEEK $\vee$ ] button for 0.8 seconds or longer to continuously move to previous channel.
- Push [SEEK $\wedge$ ] button for less than 0.8 seconds to select next channel.
- Push [SEEK $\wedge$ ] button for 0.8 seconds or longer to continuously move to next channel.
- Radio ID : Seek or Tune to XM channel 0 to display the Radio ID.


## 3. SCAN Button

Press to hear a brief sampling of all channels. To cancel the scan mode, press the button once again.

## 4. Preset Button

Push [1]~[6] buttons less than 0.8 seconds to play the channel saved in each button. Push pre-set button for $0.8 \mathrm{sec}-$ onds or longer to save the current channel to the respective button with a beep.

## 5. TUNE/SETUP Button

Turn this button clockwise to display channels after.
Also, turn this button counterclockwise to display channels before current channel. XM setup mode : It will be able to change the XM display. (ex, Display by category/ channel or artist/song title.)

## 6. INFO Button

Displays the information of the current channel in the order of Artist/Song title Category/Channel name $\rightarrow$ Current Play Channel $\rightarrow$ Artist/Song title $\rightarrow$ Category/Channel name... when the button is pressed each time.
If it can not display the whole text information, rotate the tune button to see the next page.

## 7. CATEGORY Search Button

- Push [CAT $\vee$ ] button to search previous category.
- Push [CAT $\wedge$ ] button to search next category.
To listen to the displayed category, press the TUNE/SETUP button.
To scan channel in displayed category, press the scan button.
To search channel in displayed category, press seek buttons or turn the tune button clockwise/counterclockwise.
(CATEGORY icon will be turned on in Category mode)


## RADIO, SET UP, VOLUME CONTROL (PA760BH)



## 1. FM/AM Selection Button

Turns to FM or AM mode, and toggles in the order of $\mathrm{FM} 1 \rightarrow \mathrm{FM} 2 \rightarrow \mathrm{AM} \rightarrow \mathrm{FM} 1 \ldots$ when the button is pressed each time.

## 2. Power ON/OFF \& Volume Control Button

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

## 3. Automatic Channel Selection Button

- When the[SEEK $\vee$ ] button is pressed, it reduces the band frequency to automatically select a channel. Stops at the previous frequency if no channel is found.
- When the[SEEK $\wedge$ ] button is pressed, it increases the band frequency to automatically select a channel. Stops at the previous frequency if no channel is found.


## 4. Preset Button

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

## 5. DISPLAY (Screen ON/OFF Button)

Turns on/off the displayed data and light on LCD.

## 6. TUNE/SETUP Button

When you rotate to clockwise or counterclockwise, the frequency increases or decreases by each step.
General(AM 9kHz, FM 100kHz), USA (AM 10kHz, FM 200kHz)
When you press this button, enter the SETUP mode. If no action is taken for 5 seconds after pressing the button, it will return to the play mode. (After entering SETUP mode, move between items using the left, right and push functions of the TUNE/SETUP button.)

## 7. SCAN Button

Press to hear a brief sampling of all stations on the frequency band. When you press this button again at this moment, you can receive the broadcasting that you choose.

## CDC (PA760BH)



1. RANDOM Play Button
2. REPEAT Button
3. CD/AUX Selection Button
4. Automatic Track Selection Button
5. SCAN Play Button
6. CD Eject Button
7. TUNE/SETUP Button
8. INFO Button
9. Folder Search Button
10. CD Load Button
11. CD loading slot

## 1. 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.

## 2. REPEAT Button

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

## 3. CD/AUX Selection Button

Turns to CD mode.

## 4. Automatic Track Selection Button

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


## 5. SCAN Play Button

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

## 6. CD eject Button

Push $\boldsymbol{\underline { \Delta }}$ button for less than 0.8 seconds to eject the CD during CD playback. All disc in the slot eject when the button is pressed for 0.8 seconds or longer. This button is enabled when the ignition switch is off.

## 7. TUNE/SETUP Button

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

## 8. INFO Button

Displays the information of the current CD TRACK (or FILE) in the order of DISC TITLE $\rightarrow$ DISC ARTIST $\rightarrow$ TRACK TITLE $\rightarrow$ TRACK ARTIST $\rightarrow$ TOTAL $\rightarrow$ Play Screen $\rightarrow$ DISC TITLE... when the button is pressed each time.

## 9. Folder Search Button

- Push [FOLDER $V$ ] button child folder of the current folder and display the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
- Push [FOLDER $\wedge$ ] button parent folder and displays the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
(MP3 only)


## 10. CD Load Button

Push [LOAD] button to load CDs to available 6-Disc deck (from 1~6). Push [LOAD] button for more than 0.8 seconds to load into all available decks.
The last CD will play.

## 11. 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 12 cm CDs. But if VCD, Data CD, or DVD discs are loaded, "Media Error" message will appear.

## A CAUTION IN USING USB DEVICE

- To use an 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.

1) It can only play MP3 files with the compression rate between $8 K b p s \sim 320 K b p s$.
2) It can only play WMA music files with the compression rate between 8 Kbps~320Kbps.

- Take cautions for static electricity when mounting or dismounting the external USB device.
- An 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.
- Use only a USB device formatted to FAT 12/16/32.
- USB devices without USB IF authentication may not be recognizable.
- Make sure the USB connection terminal does not come in contact with a 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 a strange noise when mounting or dismounting a USB device.
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## (Continued)

- 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 an indicator of trouble and you only have to wait.
- Do not use the USB device for other purposes than playing music files.
- Use of USB accessories such as a recharger or heater using USB I/F may lower performance or cause trouble.
- If you use devices such as a 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.


## USING USB (PA760BH)



1. RANDOM Play Button
2. REPEAT Button
3. CD/AUX Selection Button
4. Automatic Track Selection Button
5. SCAN Play Button
6. TUNE/SETUP Button
7. INFO Button
8. Folder Search Button

Using a USB that is connected to the multiple terminal inside the console on the right hand side of the driver's seat.

## 1. RANDOM Play Button

Turns on/off the randomization of the play list of files in the currently played folder. Press the button for more than 0.8 seconds to randomly play the entire songs in the USB device. To cancel the mode, press the button once again.

## 2. REPEAT Button

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

## 3. $C D / A U X$ Selection Button

If USB device is connected, it switches to the USB mode from CD mode to play the song files stored in the USB.
If the auxiliary device is connected, it turns to AUX mode to play the sound from the auxiliary player.

## 4. Automatic Track Selection Button

- Push [SEEK $V$ ] button for less than 0.8 seconds to play from the beginning of current song.
- Push [SEEK V] button for less than 0.8 seconds and press again within 1 seconds to play the previous song.
- Push [SEEK V] button for $0.8 \mathrm{sec}-$ onds or longer to initiate reverse direction high speed sound search of current song.
- Push [SEEK $\wedge$ ] button for less than 0.8 seconds to play the next song.
- Push [SEEK $\wedge$ ] button for 0.8 seconds or longer to initiate high speed sound search of current song.


## 5. SCAN Play Button

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

## 6. TUNE/SETUP Button

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

## 7. INFO Button

Displays the information of the file currently played in order of FILE $\rightarrow$ TITLE $\rightarrow$ ARTIST $\rightarrow$ ALBUM $\rightarrow$ FOLDER $\rightarrow$ TOTAL $\rightarrow$ Play Screen $\rightarrow$ FILE... when the button is pressed each time.

## 8. Folder Search Button

- Push [FOLDER $\vee$ ] button sub folder of the current folder and display the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
- Push [FOLDER $\wedge$ ] button main folder and displays the first song in the folder. Press TUNE/SETUP button to move to the folder displayed. It will play the first song in the folder.
(MP3 only)


## RUNNING iPod ${ }^{\circledR}$ (PA760BH)



Using un iPod when the exclusive cable is connected to the multiple terminal inside the console on the right hand side of the driver's seat.

## 1. RANDOM Playback Button

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

## 2. REPEAT Button

Repeats the song currently played.

## 3. CD/AUX Selection Button

If an iPod is connected, it switches to the iPod mode to play the song files stored in the iPod.

## 4. Automatic Track Selection Button

- Push [SEEK $V$ ] button for less than 0.8 seconds to play from the beginning of the current song.
- Push [SEEK $V$ ] button for less than 0.8 seconds and press again within 1 seconds to play the previous song.
- Push [SEEK $V$ ] button for $0.8 \mathrm{sec}-$ onds or longer to initiate reverse direction high speed sound search of current song.
- Push [SEEK $\wedge$ ] button for less than 0.8 seconds to play the next song.
- Push [SEEK $\wedge$ ] button for 0.8 seconds or longer to initiate high speed sound search of current song.


## 5. Category Selection Button

Press [CAT FOLDER $\wedge / \vee$ ] button to move the category and display the first song in the category. Press [ENTER] button to move to the category displayed. It will play the first song in the folder.
 RES $\rightarrow$ SONGS ${ }^{\prime \rightarrow}$ COMPOSERS $\rightarrow$ PLAYLISTS ${ }^{-\rightarrow . . .)}$

## 6. TUNE/SETUP Button

Turn this button clockwise or counterclockwise, it will display the category menu. To select the displayed menu, press the button.

## 7. INFO Button

Displays the information of the file currently played in order of TITLE $\rightarrow$ ARTIST $\rightarrow$ ALBUM $\rightarrow$ Play Screen $\rightarrow$ TITLE...

## * 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 the iPod. (Reset: Refer to iPod manual)
- An iPod may not operate normally on low battery.


## A. CAUTION IN USING iPod DEVICE

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


## XM Satellite Radio (PA760BH)



## 1. XM Selection Button

Turns to XM Satellite Radio Mode.
XM mode toggles in order to $\mathrm{XM} 1 \rightarrow \mathrm{XM} 2$ $\rightarrow$ XM3 $\rightarrow$ XM1 ... when the button is pressed each time.

## 2. Automatic Channel Selection Button

- Push [SEEK $\vee$ ] button for less than 0.8 seconds to select previous channel.
- Push [SEEK $\vee$ ] button for 0.8 seconds or longer to continuously move to previous channel.
- Push [SEEK $\wedge$ ] button for less than 0.8 seconds to select next channel.
- Push [SEEK $\wedge$ ] button for 0.8 seconds or longer to continuously move to next channel.
- Radio ID : Seek or Tune to XM channel 0 to display the Radio ID.


## 3. SCAN Button

Press to hear a brief sampling of all channels. To cancel the scan mode, press the button once again.

## 4. Preset Button

Push [1]~[6] buttons less than $0.8 \mathrm{sec}-$ onds to play the channel saved in each button. Push pre-set button for $0.8 \mathrm{sec}-$ onds or longer to save the current channel to the respective button with a beep.

## 5. TUNE/SETUP Button

Turn this button clockwise to display channels after.
Also, turn this button counterclockwise to display channels before current channel. XM setup mode : It will be able to change the XM display. (ex, Display by category/ channel or artist/song title.)

## 6. INFO Button

Displays the information of the current channel in the order of Artist/Song title $\rightarrow$ Category/Channel name $\rightarrow$ Current Play Channel $\rightarrow$ Artist/Song title $\rightarrow$ Category/Channel name... when the button is pressed each time.
If it can not display the whole text information, rotate the tune button to see the next page.

## 7. CATEGORY Search Button

- Push [CAT $V$ ] button to search previous category.
- Push [CAT $\wedge$ ] button to search next category.
To listen to the displayed category, press the TUNE/SETUP button.
To scan channel in displayed category, press the scan button.
To search channel in displayed category, press seek buttons or turn the tune button clockwise/counterclockwise.
(CATEGORY icon will be turned on in Category mode)


## BLUETOOTH PHONE OPERATION



## General Feature

- This system supports Bluetooth, a wireless system that allows you to make or receive calls without taking your hands from the steering wheel and without using cables to connect the phone and system.
- The phone must be paired to the system before using the hands-free feature. Only one linked cellular phone can be used with the system at a time. The System is available in English, US Spanish, or Canadian French languages.


## A caution <br> If the vehicle is moving do not use a cellular phone or connect the Bluetooth phone.

## * NOTICE

Some Bluetooth devices do not offer a perfect compatibility with this system.

## Voice Recognition Activation

- The voice recognition engine contained in the Bluetooth System can be activated in the following conditions:
- Button Activation

The voice recognition system will be active when the $\uparrow \varepsilon$ button is pressed and after the sound of a Beep.

- Active Listening The voice recognition system will be active for a period of time when the Voice Recognition system has asked for a customer response.
- The system can recognize single digits from zero to nine while number greater than ten will not be recognized.
- If the command is not recognized, the system will announce "Pardon" or No input voice signal from microphone. (No response)
- The system shall cancel voice recognition mode in following cases: When pressing the $\&$ button and saying cancel following the beep. When not making a call and pressing the button. When voice recognition has failed 3 consecutive times.
- At any time if you say "help", the system will announce what commands are available.


## ■ Menu tree



## - Phone Setup

## - Pairing phone

To use the hands-free system, you need to register your phone in the system. Up to 5 phones can be registered in the system.

1. Press the $\uparrow \hat{\varepsilon}$ button.
2. Say "Set Up".
3. Say "Pair Phone".
4. Say "Yes".
5. Say the name of the contact.
6. Say "Yes".
7. The Pairing procedure of the cellular phone varies according to each cellular phone.

## * NOTICE

The system may not function in the following cases:
If 5 phones have already been registered. If the system cannot communicate with the phone.

## - To connect phone

The registered phones can be selected. When the system connects to Bluetooth, the phone previously used is automatically selected. Select a different phone if necessary. Only the selected phone can be used with the hands-free system.

1. Press the button.
2. Say "Set Up".
3. Say "Select Phone".
4. Say the name of the contact or the number of the contact.
5. Say "Yes".

## * NOTICE

The system may not function in the following cases:
If the phone is not found.
If the system does not recognize the voice command.

## - Deleting phone

The registered phones can be deleted.

1. Press the button.
2. Say "Set Up".
3. Say "Delete Phone".
4. Say the name of the contact, the number of the contact or "Delete all phone".
5. Say "Yes".

## - Changing Priority

The connection priority for registered phones can be changed.

1. Press the ber button.
2. Say "Set Up".
3. Say "Change Priority".
4. Say the name of the contact or the number of the contact.
5. Say "Yes".

- Turning Bluetooth on / off

Bluetooth function can be switched ON/ OFF. initial status : Bluetooth ON

1. Press the $\omega \hat{\text { m }}$ button.
2. Say "Set Up".
3. Say "Bluetooth off".
4. Say "Yes".

## - Turning Bluetooth on

1. Press the send or $\square$ button.
2. Say "yes".
3. The Bluetooth will be turned on.

## ■ Phone Book

## - Adding Entry

Phone numbers and voice tags can be registered. Entries registered in the phone can also be transferred.

## - Adding Entry by Voice

1. Press the 0 button.
2. Say "phonebook".
3. Say "add entry".
4. Say "by voice".
5. Say the name of the contact.
6. Say "yes".
7. Say the phone number.
8. Say "store".
9. Say "Home", "Office", "Mobile", "Other" or "default".
10. Say "Yes" to store an additional location for this contact.

## - Adding Entry by phone

1. Press the button.
2. Say "phonebook".
3. Say "add entry".
4. Say "by phone".
5. Say "yes".
6. Transfer procedures may vary depending on the cellular phone.

## * NOTICE

The system can recognize single digits from zero to nine. Numbers that are ten or greater are not recognized.
To speed up input, it is a good idea to group all digits into a continuous string. However, you can enter each digit individually or group digits together in preferred string lengths.
The display corresponding to each operation appears on the screen as follows:

Input operation

1. say: "Nine, nine, five"

Display: "995"
2. say: "Seven, three, four"

Display: "995734"

## - Changing Name

The registered names can be changed.

1. Press the 0 button.
2. Say "phonebook".
3. Say "Change name".
4. Say the name of the phonebook [voice tag].
5. Say "yes".
6. Say the name of the phonebook to be changed.

## - Deleting name

The registered names can be deleted.

1. Press the $\uparrow \varepsilon$ button.
2. Say "phonebook".
3. Say "Delete name".
4. Say the name of the contact.
5. Say "yes".

## ■ Making a phone call

- Calling by Name

The system dials the numbers corresponding to the spoken names registered in the system.

1. Press the bi button.
2. Say "Call".
3. Say "name".
4. Say "<John>".
5. Say "<at home>".
6. Say "yes".

* Tip

A shortcut to each of the following functions is available.

1. Say "Call name".
2. Say "Call <john>".
3. Say "Call <john at home>".

## - Dialing by Number

The system will make a phone call by dialing the spoken numbers.
The system can recognize single digits from zero to nine.

1. Press the $\omega$ button.
2. Say "Call".
3. Say "Number".
4. Say "<digit number>".
5. Say "<added digit number>".
6. Say "Dial".

* Tip

A shortcut to each of the following func-

## tions is available.

1. Say "Dial number".
2. Say "Dial <digit>".

## - Receiving a phone call

When receiving a phone call, a ring tone is audible and the system changes into telephone mode.
When receiving a phone call, the phone number and the message "Incoming" will be displayed.

- Do either one of the following: Press the send switch to take the call. Press the end switch to refuse the call.
- To adjust the ring volume, push "+" or "" on the steering volume controls. Volume adjustment cannot be made using the audio system.
- To transfer a call to the phone:

The received call can be transferred from the hands-free system to the cellular phone that is connected to Bluetooth. For details, please refer to you user's manual for the cellular phone or go to the Key matrix in this manual (next page).

## Talking on the phone

When talking on the phone, the display will differ depending on whether or not the vehicle is in motion.
Number and "active call" is displayed. When the call is finished, press the end switch.

## * NOTICE

In the following situations, your voice may not reach the other party:

1. Talk alternately with the other party on the phone. If you talk at the same time, the voice may not reach each other parties. (This is not a malfunction.) (It is not a malfunction.)
2. Keep the volume of receiving voice to a low level. Otherwise, high volumes may result in an echo. When you talk on the phone, speak clearly towards the microphone.
3. When driving on a rough road.
4. When driving at high speeds.
5. When the window is open.
6. When the air conditioning vents are facing the microphone.
7. When the sound of the air conditioning fan is loud.

■ Key matrix

| No. | KEY | Disconnected(BT Icon off) |  | Connected (BT Icon On) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Paired H/P } \\ & \text { Empty } \end{aligned}$ | $\begin{aligned} & \text { Paired H/P } \\ & \text { Exist } \end{aligned}$ | Connected |  | Incoming Call | Outgoing Call | Active Call | TRANSFER CALL |
|  |  |  |  | Normal mode | BT SETUP menu |  |  |  |  |
| 1 | SHORT | Not Connect | - | - | - | Accept Call | - | Transfer Call (Handsfree <->Phone) |  |
|  | LONG | - | - | VR <br> MODE Cancel | - | Reject Call | End Call | End Call | End Call |
|  | SHORT | System not ready Pleas wait moment | Active | Active | Active | - | - | - | - |
|  | LONG <br> [10sec] | System not ready Pleas wait moment | Change language | Change language | Change language | - | - | - | - |
| 3 | STEERING MODE KEY | - | - | - | - | - | - | 2nd call 1st Call:waiting 2nd Call:active | - |
| 4 | AUDIO POWER KEY | - | - | - | - | Reject Call | End call | End call | - |

## HM RADIO ${ }^{\text {TM }}$ (PA710BH)



## HD RADIO (TM) INFORMATION

## Licensing information

H) Radio ${ }^{\circ}$

HD Radio ${ }^{\text {TM }}$ Technology Manufactured Under License From Biquity Digital
Corporation. U.S. and Foreign Patents. HD Radio ${ }^{\text {TM }}$ and the HD Radio logo are proprietary trademarks of Biquity Digital Corporation.

## Availibilty information

HD Radio ${ }^{\text {TM }}$ reception is available in the United States, including Alaska and Hawaii.

## What is HD Radio ${ }^{\text {TM }}$ technology?

This audio system is able to receive standard analog FM/AM radio broadcasting as well as digital HD Radio ${ }^{\text {TM }} \mathrm{FM} / \mathrm{AM}$ broadcasting.
HD Radio ${ }^{\text {TM }}$ technology provides digital and analog reception using existing FM and AM broadcasting frequencies.

Currently, radio stations broadcasting an HD Radio ${ }^{\text {TM }}$ signal are operating in a hybrid mode of both, analog and digital, in order to reach both receivers. In both modes, analog and digital, the broadcasted program contents is the same(except of multicasting, see below).

Eventually, as analog receivers are replaced by digital ones, radio stations may be able to turn off their analog broadcasting and use only the digital one.

## Multicasting

HD Radio ${ }^{\text {M }}$ FM stations are able to broadcast multiple digital program streams(channels) over a single FM frequency. For example, a HD Radio ${ }^{\text {TM }}$ FM station can run a main channel of music and a sub channel of news(or even two different music channels) at one frequency.

But only the program content of the main channel is also broadcasted analog.

## HD Radio ${ }^{\text {TM }}$ signal delay

To overcome the delay that digital systems inherently produce, HD Radio ${ }^{\text {TM }}$ technology first uses the audio signal of the analog broadcasting when you tune to an AM station or to the main channel of a FM station. After that, the system will blend from analog to digital signal.

Normally, this blending is very smooth. If you experience a skip in program content of several seconds, the radio station has not implemented HD Radio ${ }^{\text {TM }}$ broadcasting correctly. This is not a problem with your audio system.

Due to the fact that sub channels are only broadcasting digital, blending from analog to digital signal is not possible if you tune to a sub channel. In this case playback of the sub channel starts after several seconds, this is a normal function.

## Automatic switching between dig-

 ital and analog broadcastingIf the reception of the digital signal is lost, the system switches automatically to the analog signal. As soon as the digital signal is available again it will switch back.

Due to the fact that sub channels are only broadcasted digital, first the system mutes playback if you have tuned to a sub channel and the digital signal is lost. Additionally, the main shows the message No HD signal in place of station name.
Second, after 1 minute with the digital signal lost, the system will automatically tune to the analog signal of the corresponding frequency.

## Text based information

HD Radio ${ }^{\text {TM }}$ stations are able to broadcast text based informations, e.g. station name, song title and artist name. The Driver Information System is able to display these informations.

## Radio display while receiving a digital HD Radio ${ }^{\text {TM }}$



1. Call Sign(Station Name)
2. Channel Name(HD1=main channel, HD2~8=sub channel)
3. Indicator for HD Radio ${ }^{\text {TM }}$

## 1.SEEK UP/DOWN Button

Press this button to automatically select previous or next station.


## 2. SCAN Button

Press to hear a brief sampling of all station on the frequency band.
But no scaned HD Radio(TM) signal. When you press this button again at this moment, you can receive this broadcasting that you choose.

## 3. INFO Button

Showing details of this currently tuned HD Radio ${ }^{\text {TM }}$ station.(Showing the artist name, song title)

## 4. Preset Button

Push [1] ~[6] buttons less than $0.8 \mathrm{sec}-$ onds to play the channel saved in each button.
Push preset button for 0.8 seconds or longer to save current channel to the respective button with a beep.

## 5. TUNE/SETUP Button

When you rotate to clockwise or counterclockwise, the frequency increase or decrease. But skipped HD Radio(TM) signal.

$$
\text { ex) } \mathrm{HD} 1(107.7 \mathrm{MHz}) \rightarrow 107.8 \mathrm{MHz}-\ldots
$$

When you press this button, enter this SETUP mode. If you select the "HD" menu, you can control the HD setup menu.



1. You can off/on FM HD Radio(TM) reception.
2. You can off/on AM HD Radio(TM) reception.
3. Details on/off

Features of your vehicle

Details on display

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| ゅ) 비 FM 1 <br> 2 LED ZEPPELIN (Artist) JSTAIRWAY TO HEAVEN |  | 107.7 | MHz |
|  |  | HD1 | P2 |
| $77^{\circ} \mathrm{F}$ | \$s unulll ${ }^{\text {OUT }} 55^{\text {SIDE }}$ | Au' |  |

Details off display


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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

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

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

