# Smart display (MTXW100BAPE)

#### **USER'S MANUAL**

## i10

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

The screens shown in this manual may differ from the actual screens of the product.

The design and specification of this product may change without prior notification for product improvement.

When transferring the vehicle to another individual, include this user's manual so that the next driver can continue its use.

## iPod®

iPod® is a registered trademark of Apple Inc.

## Bluetooth®

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

DC Symbol

DC 12V

Speaker 4Ω

Fuse 10A

-Minus Ground

## Cortex

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

## Windows Embedded Compact 7

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

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## **Precautions for safety**

## Safety notes



## **CAUTION**

RISK OF ELECTRIC SHOCK DO NOT OPEN



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



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



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



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

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



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

Refer servicing to qualified service personnel.



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



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



Do not drop it and avoid heavy impacts at anytime.



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

## **Precautions for safety**

#### **WARNING:**

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

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

#### **CAUTION:**

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

# **Key Product Features**

# **Key Product Features**

Button	Description
Display	Wide IPS Display Provides high quality video through a Wide IPS Display using an LED Back Light.
Radio	Digital Tuner Feature Digital Tuner using PPL method that supports memory of 20 broadcast stations for each AM and FM modes.  Radio broadcast station name Displays broadcast station names for key locations.
Multimedia Player	Support for various Media Formats Support for various media formats, including Radio, MP3, USB, iPod® and Bluetooth® Audio Streaming modes.
Miscellaneous	Bluetooth® Wireless Technology Convenient use of Bluetooth® Handsfree by using buttons within the steering wheel remote controller.
	Digital Screen Control Features Easy control of features through touch screen options.
	Steering Wheel Remote Controller Control over audio features and Bluetooth® through the steering wheel remote controller for maximum convenience.
	Apple CarPlay CarPlay puts key iPhone apps - the ones you want to use while driving - on your car's built-in display. With CarPlay, you can get turn-by-turn directions, make phone calls, exchange text messages, listen to music, and more.

# **Component Names and Functions**

## **Head Unit**



Button	Description
1 POWER / VOL Knob	<ul> <li>Power on         When power is off, press to turn power on.</li> <li>Power off         When power is on, press and hold to turn power off.</li> <li>Audio off         When power is on, press to turn Audio off.</li> <li>Turn left/right to control volume.</li> </ul>
2 4/6	<ul> <li>Press to display the Home menu screen.</li> <li>Press and hold to activate the Google voice or the Siri function when your Android phone or iPhone is connected to the unit. (optional)</li> </ul>
3 RADIO	<ul> <li>Operates FM/AM mode.</li> <li>Each time the key is pressed, mode is changed in order of FM ► AM ► FM.</li> </ul>
4 Microphone	Detects voice during phone conversations.
5 MAP	Press to display the map screen of the current location when in a different mode.

# **Component Names and Functions**

## **Head Unit**



Name	Description	
	<ul> <li>When the</li></ul>	
6 SEEK TRACK	when the SEEK TRACK keys are pressed and held.  • FM/AM mode : automatically searches broadcast frequencies and channels. Once released, searches and begins playing the next broadcast frequency.  • Media mode: rewinds or fast forwards the track or file	
7 USB port	Connect USB device or iPod®.	
8 Reset	Resets the system.	
9 TUNE / ENTER knob	FM/AM mode: changes the frequency.     Media mode: changes the track, file or title.	

## Using the System for the First Time

## Turning the System On/Off

## Turning the System ON

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





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

Press the Agree button to display the most recent mode.

## Turning the System Off

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

#### NOTE

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

### AV ON/OFF

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

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

## Resetting the System

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



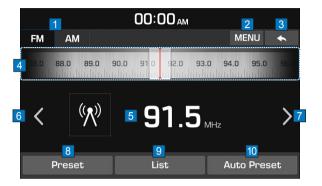
Press and hold the RESET key for about 1 second. (The use of a clip or pin is recommended when resetting the system.)

## Home Screen



## FM/AM

## **Basic Screen**





Button	Description
1 Mode tab	Press the tab to change between FM and AM mode.
2 MENU button	Displays List, Preset, Scan, Preset scan and Sound settings menus.
3 Back button	Moves to the previous screen.
4 Frequency bar	Use the tap to move to the desired frequency.
5 Frequency	Displays the current frequency.
6 Tune down	Single tap: tune down. Long tap: tune down until the button is released and plays the current frequency.
7 Tune up	Single tap: tune up. Long tap: tune up until the button is released and plays the current frequency.
8 Preset	Displays the Preset List.
9 List	Displays automatically updated lists.
10 Auto Preset	Searches for currently available broadcasts and saves automatically to presets.
11 List	Displays automatically updated lists.
12 Preset	Displays saved presets for user selection.
13 Scan	Plays frequencies with superior reception for 3 seconds each.
14 Preset Scan	Plays frequencies saved to presets for 3 seconds and moves to the next saved frequency.
15 Sound settings	Sets sound related settings.

## FM/AM

## Listening to FM/AM radio

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



### **Auto tuning**

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

## Manual tuning

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

## **Selecting Presets**

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



## **Selecting Lists**

Press the MENU button ▶ Press the List

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

FM lists are automatically updated.

AM lists are manually updated by pressing ( c ).



#### **Auto Preset**

Press the Auto Preset button the automatically save frequencies with superior reception to presets.

## FM/AM

## Saving Radio Frequency

## Saving Manually

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



### **Using Preset Menu**

Press and hold the preset list you want to edit.



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



#### NOTE

• Press the MENU button ▶ Press the Delete all button to delete entire list of presets.

#### Scan

## Scanning Radio Frequency

Press the MENU button ▶ Press the Scan button.



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

## **Scanning Preset frequency**

Press the MENU button ▶ Press the Presst Scan button.

Plays frequencies saved to presets for 3 seconds.

#### **NOTE**

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

## Sound settings

Press the MENU button ▶ Press the Sound settings button.

For details, refer to the "Sound" on the page 37.

## **USB**

### **About USB**

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

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

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

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

## **USB Music**

## Playing USB Music

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





#### **NOTE**

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

## Searching USB Music Files

- Pressing and holding the Key or the Key or
- While the SEEK TRACK key or the North button is being pressed, the track will rewind or fast-forward at high speeds. Once the key is released, the USB Music will begin playing at normal speed.

#### **NOTE**

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

#### Repeat

Press the 🔁 button.

#### Shuffle

Press the 🔀 button.

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

#### Scan All

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

#### Scan Folder

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

## **USB Music**

## **Album Cover view**

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



## List

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



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

## Sound settings

Press the MENU button ▶ Press the Options button ▶ Press the Sound settings button.

For details, refer to the "Sound" on the page 37.

## **USB Video**

## Playing USB Video

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





#### **NOTE**

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

## Searching USB Video Files

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

#### **NOTE**

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

#### Repeat

Press the 🔁 button.

#### Shuffle

Press the 🔀 button.

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

## **USB Video**

### List

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



It is possible to search by Folder and Videos.

## **Caption**

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



## **Display settings**

Press the MENU button

▶ Press the Display settings button.



Press the Reset button to initialize the settings.

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

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

## Sound settings

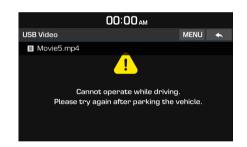
Press the MENU button

▶ Press the Sound settings button.

For details, refer to the "Sound" on the page 37.

#### **NOTE**

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



## **USB Photo**

## **Viewing USB Photo**





#### NOTE

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

# Switching to menu screen or full screen

Press the photo to view with full screen.

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





#### NOTE

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

### Searching USB Image Files

Press 🛧 to view the list of USB photos.

## Rotating / Slide show

Press the O C buttons to rotate image.

Press the D button to view slide show.



#### **NOTE**

Press to move to the previous screen.

## **USB Photo**

## Using the Menu Buttons

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



#### Slideshow interval

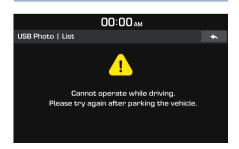
Press the MENU button ▶ Press the Slide time button.



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

#### **NOTE**

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



## Display settings

Press the MENU button ▶ Press the Display settings button.

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

## iPod® Music

#### About iPod®

iPod® is a registered trademark of Apple Inc.

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

 If iPod® touch or iPhone is used, iOS4.2 or a later version is recommended.

## iPod® Music

## Playing iPod® Music

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



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

#### **NOTE**

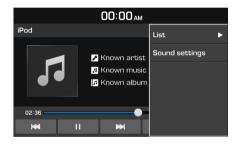
 If the iPod® is not connected, or there is no media file in iPod® then the iPod® Music button will be disabled.

## Searching iPod® Music Files

You can play the previous or next file. For details, refer to the page 16.

## Using the Menu Buttons

Press the MENU button to set List and options menus.



For details, refer to the "List" on the page 17.

## Sound settings

Press the MENU button ▶ Press the Options button ▶ Press the Sound settings button.

For details, refer to the "Sound" on the page 37.

## Bluetooth® Audio

# Before playing the Bluetooth® audio

- Music saved in the mobile phone can be played in the car through Bluetooth® audio streaming.
- Bluetooth® audio can be played only when a Bluetooth® phone or Bluetooth® audio device has been connected. To play Bluetooth® audio, connect the Bluetooth® phone to the car system. For more information on connecting Bluetooth®, please refer to the user's manual Bluetooth® Connection on page 27.
- If Bluetooth® is disconnected while playing Bluetooth® audio, the audio stream will be interrupted.
- The audio streaming function may not be supported in some mobile phones. Only one function can be used at a time, either the Bluetooth® handsfree or the Bluetooth® audio function. For example, if you convert to the Bluetooth® handsfree while playing Bluetooth® audio, the music stream is interrupted.
- Playing music from the car is not possible when there are no music files saved in the mobile phone.

## Playing Bluetooth® audio



- Press the button to play files saved within the Bluetooth® phone.
- Press the **II** button to pause the file.

## Searching Bluetooth® audio Files

You can play the previous or next file. For details, refer to the page 16.

#### **NOTE**

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

## Using the Menu Buttons

Press the MENU button to set Sound settings menus.



For details, refer to the "Sound" on the page 37.

## Getting started with navigation

## Precautions for safe driving

Please observe and comply with local traffic rules and regulations.

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

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

#### What is GNSS?

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

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

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

## About satellite signals

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

## Acquiring satellite signals

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

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

Acquiring satellite signals can take a few minutes.

## Bluetooth® Wireless Technology

# Before Using the Bluetooth Handsfree

# What is Bluetooth® Wireless Technology?

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

## **Precautions for Safe Driving**

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

# Cautions upon Connecting Bluetooth Phone

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

## Bluetooth® Connection

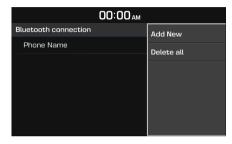
# When no Phones Have Been Paired





## Pairing from the Bluetooth® Device

Press the MENU button ▶ Press the Add New button.





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

## Bluetooth® Connection

## When a Phone is Already Paired



#### NOTE

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

# When your phone is connected

Press the Phone button on the head unit to display the following screen.



#### **NOTE**

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

## Making/Answering Calls

## Calling by Dialing a Number

Enter number on the Dial Pad ▶ Press the button.



#### NOTE

- If you press the wrong number, press to delete one digit of the entered number. Press and hold the dial pad 0 "+" to enter a "+".
- Press the Q button to search phone numbers. For detail, refer to the "Searching for contacts" on the page 31.

## Calling through Redial

Press and hold the button.

#### NOTE

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

## Answering a Call

Incoming call notice ▶ Press the button.



#### Rejecting a Call

Incoming call notice Press the button.

# Operating Menus during a Call



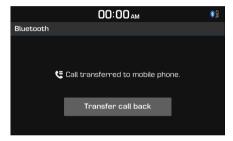
Button	Description
1 6	Switches a voice call from the car handsfree to the mobile phone.
2	Ends a call.
3	3 Way call.
4	Turns the Mic On/Off.
5	Display dial pad screen for entering ARS numbers.

## **Ending a Call**

While on a call ▶ Press the button.

## Switching Call to Bluetooth® Phone

During handsfree call ▶ Press the button.



During call on mobile phone ▶ Press the Transfer call back button.

## Making 3 way call

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

## Using the Menu Buttons

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

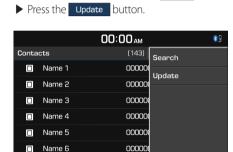


#### Contacts

### **Updating Mobile Phone Contacts**

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

In Contacts screen ▶ Press the MENU button



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

## Making a call from contacts

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



#### Searching for contacts

In Contacts screen ▶ Press the MENU button ▶ Press the Search button ▶ Enter the name ▶ Press the OK button ▶ Press the contact you want to call.



## **Calling list**

## **Viewing Calling lists**

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



Press the MENU button on Calling list screen.

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

#### **NOTE**

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

## **Favourites**

### **Calling Favourites**

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

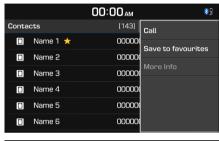


#### Saving to Favourite

In Phone screen ▶ Press the Add to favourites button.



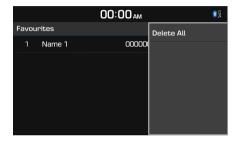
In Contacts screen or Calling list screen Press and hold the contact you want to save Press the Save to Favourites button.



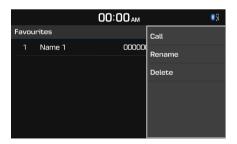


#### **Deleting Favourites**

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



In Favourites screen ▶ Press and hold the favourite you want to delete ▶ Press the Delete button. ▶ Press the Delete button.



## Changing the Favourites name

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



## Bluetooth® settings

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



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

## Apple CarPlay

## **About Apple CarPlay**

- CarPlay puts key iPhone apps the ones you want to use while driving - on your vehicle's built-in display. With CarPlay, you can get turn-by-turn directions, make phone calls, exchange text messages, listen to music, and more. Apple CarPlay is available on select automobiles navigation systems, and works with iPhone 5 or higher with iOS 7.1 or higher.
- You can operate CarPlay using your vehicle's built-in controls - a touchscreen, a rotary knob controller, or both. To learn how to operate your display, refer to the user guide that came with your vehicle. Or just use Siri voice control to tell CarPlay what you want. In fact, Siri often steps in automatically to help you, depending on the app you're using.
- For more information & troubleshooting, refer to the iPhone manual or visit the Apple website.

## **Precautions**

- Apple CarPlay is unavailable if the version of communication protocol is not supported or your phone cannot be recognized due to a shutdown caused by a failure or defect in the device itself
- Your phone may not be recognized if its battery is low. Charge your phone then try again.
- If your phone is shut down due to a defect in the device itself, reset your phone and try again.
- If you repeatedly connect and disconnect the USB cable on the device in a short period of time, your phone may malfunction. This can also cause a device failure.
- The device recognition time may differ depending on the device type and firmware/ OS version.
- When using this feature, the use of a dedicated cable is recommended. (Using a non-genuine product may cause noise or malfunction.)
- Apple CarPlay may not operate normally due to mobile phone issues.

## What you need?

- 1. An iPhone5 or higher.
- 2. A car that's compatible with iPhone.
- 3. A Genuine USB cable from Apple.

## Before starting Apple CarPlay

## Setting Siri on the iPhone

Siri must be enabled on your iPhone. If Siri is turned off, a notice will be displayed.

Go to Settings ▶ General ▶ Siri ▶ Turn on Siri.



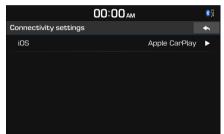
### Setting the system

Before connecting your mobile phone, check whether Apple CarPlay is set to be used in Setup



## Apple CarPlay







## Starting mode

Connect your phone to your car using a USB cable. The CarPlay Home screen will be displayed automatically.



When in a different mode, press Media ▶ Apple CarPlay.



## Home Screen



No	Description
1	Return to a call, or to turn-by-turn directions
2	Home button
3	View current audio source
4	Return to your car's Home screen

#### NOTE

- Map and Turn by Turn features are available only in countries supported by Apple (check link for information on supported countries). (http://www.apple.com/ios/featureavailability/#applecarplay-applecarplay)
- The position of the Home button changes according to driver seat location.

## Apple CarPlay

## Speak to Siri

Press and hold the button on the steering wheel, or touch and hold the Home button on the CarPlay Home screen, until Siri beeps.

Then say commands you want to use. Then you can do things like send or reply to a text, search for a location, make a call, or play your music.

## Open an app

Tap the app on the touchscreen.

# Return to the CarPlay Home screen

Tap the Home button on the touchscreen.

## Return to your car's screen

Tap the car logo. Or press the key or the desired key on the device.

## View additional apps

If you have more than eight apps, some apps may appear on another page of the Home screen. Swipe left on the touchscreen.

# Return to a phone call or to turn-by-turn directions

Tap the icon in the upper-left corner of the touchscreen.

# View and control the current audio source

Tap Now Playing to see the current audio app.

## Starting mode

Press the SETUP key to display the Setup screen.



## Sound

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

Press the SETUP key ▶ Press the Sound button.



#### **Position**

In the Sound Settings screen ▶ Press the

Position ▶ Set the desired sound position.



Press the Reset button to restore sound to the centre position.

#### Tone

In Sound settings screen ▶ Press the Tone button ▶ Set the desired sound balance.

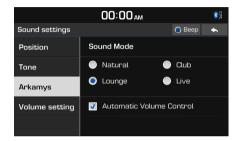


Use the +, - and • buttons to adjust settings.

Press the Reset button to initialize the settings.

#### **Arkamys**

In Sound settings screen ▶ Press the Arkamys button ▶ Set the desired mode.



#### **NOTE**

- Once the S/W is updated to a version that supports Arkamys, the Variable EQ feature becomes unavailable.
- Automatic Volume Control (AVC) is a feature that ensures constant output volume even when sound sources or music files have different volume levels.
- Arkamys is an optional feature for customers who have selected this option.

## Volume setting

In Sound settings screen ▶ Press the

Volume setting button ▶ Set the desired volume.



Button	Description	
1 Phone	Controls the volume related to phone.	
2 Start up	<ul> <li>If the most recently set Audio volume is lower than the volume set upon startup, the audio volume will become the startup volume when starting the system. If the Audio volume is higher than the Startup volume, then the current Startup volume is maintained.</li> <li>In addition, if the most recent volume level was higher than 35, the volume level will be set to 35 when starting the system.</li> </ul>	

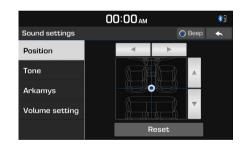
Use the +, - and 0 buttons to adjust settings.

Press the Reset button to initialize the settings.

#### Beep

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

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



## **Display**

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

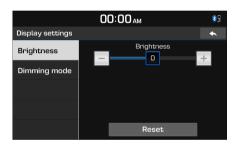
Press the SETUP key ▶ Press the Display button.



#### **Brightness**

In Display settings screen ▶ Press the

Brightness button ▶ Set the desired brightness.

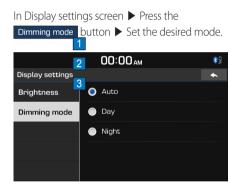


Use the +, - and o buttons to adjust settings.

Press the Reset button to initialize the settings.

## Dimming mode

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



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

## Bluetooth® settings

This menu allow you to set Bluetooth® settings.

Press the SETUP key ▶ Press the Bluetooth button.

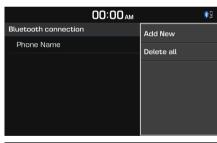


#### Bluetooth® connection

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

In Bluetooth® settings screen ▶ Press the

Bluetooth connection button ▶ Set the desired settings.





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

#### Ringtone

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

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



### Change passkey

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

In Bluetooth® settings screen ▶ Press the

Change passkey button ▶ Enter the passkey.



#### NOTE

• The default passkey is 0000.

#### Changing device name

In Bluetooth® settings screen ▶ Press the Change device name button ▶ Enter the name.



#### **NOTE**

The default device name is BAPF AVNC Viet Nam.

#### **Auto Connection Priority**

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

In Bluetooth® settings screen ▶ Press the

Auto Connection Priority button ▶ Set the desired settings.

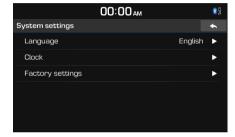


#### NOTE

 If you press No Phone Selected , the most recently connected Bluetooth® phone will connect automatically.

## **System**

Press the SETUP key ▶ Press the System button.

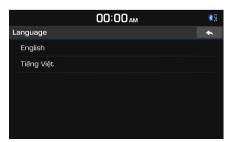


#### Language

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

In System settings screen  $\blacktriangleright$  Press the

Language button ▶ Press the desired language.



#### Clock

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



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

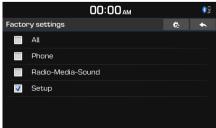


### **Factory settings**

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

In System settings screen ▶ Press the Factory settings button ▶ Press the desired item ▶ Press the ton. ▶ Press the TES button.

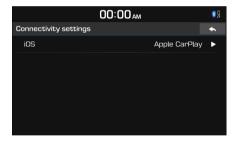




## Connectivity

This menu allows you to set the car connectivity of your system.

Press the SETUP key ▶ Press the Connectivity button ▶ Press the desired settings.



## **Specification**

## **USB MP3 Specification**

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

## Video and Image Specification

Category	Description
File Format	AVI(DivX), MPEG
Image Format	jpg, gif, bmp, png
Extensions	avi, divx, mpg, mpeg, mp4, wmv
Supported Image Resolution	Max 4000x3000
Supported Image File Size	Max 4 Mbytes
Supported image zoom in/out	Max 300%
Video Codec	MPEG4-ASP, MPEG4-AVC(H.264), AVS, VP8
Video Resolution	1920 x 1080 (WMV 9: Max 8Mbps, 1280x720, WMV 8: 640x480)
Audio Codec	MP3, OGG, WMA(AC3 not supported)
Subtitles	SMI
Unsupported files	<ul> <li>Files not compatible with supported specifications</li> <li>Modified files (files with modified file formats)</li> <li>Transformed files (example: AVI files encoded with WMV video codec)</li> <li>Files without indexes</li> </ul>

# **Specification**

## TFT-LCD

Screen Size	8 inch (177.6 mm) diagonal
Resolution	384,000 pixels (Resolution : 800 x 480)
Operating Method	TFT
Viewing Angle	Left/Right, Top/Bottom: (80°, 80°, 80°, 80°)
Internal Lighting	LED

## Radio

Channels	FM: 87.5MHz ~ 107.9MHz(Step: 100KHz)
	AM:530 kHz ~ 1710kHz(Step: 10kHz)
Sensitivity	FM : Under 10 dBuV / AM: Under 35dBu EMF
Distortion Factor	Within 2%

## Bluetooth® Wireless Technology

Frequency Range	2402 ~ 248 <b>0</b> MHz
Supported Bluetooth® Specification	2.1+EDR
Supported Profile	HFP (1.5), A2DP (1.2), AVRCP (1.4), PBAP(1.0)
Bluetooth® Power	Class2
Number of Channels	79 channels

### Common

Power Supply	DC <b>12</b> V	Operating Power	DC 9V ~ DC 16V
Class Course	1mA or less (after 96 hours with ACC OFF)		
Sleep Current	10mA or less (before 96 hours with ACC OFF)		
Operating Temperature	-20 ~ +70 °C (-4 ~ +158°F)	Storage Temperature	-30 ~ +80 °C (-22 ~ +176°F)
Dimension	W 225.8 x H 150.9 x D 184.4 mm		
Current Consumption	10A		
Weight	1.8Kg		

## Before thinking there is a product defect

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

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

tires).

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

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

- Guidance to go straight may be given while driving on a straight road.
- Guidance may not be given even when having turned at an intersection.
- There are certain intersections in which guidance may not occur.

- A route guidance signaling for a u-turn may occur in some No u-turn intersections.
- Route guidance signaling entrance into a No-entry zone may occur (No-entry zone, road under construction, etc.).
- Guidance may be given to a position that is not the actual destination if roads to reach the actual destination do not exist or are too narrow.
- Faulty voice guidance may be given if the vehicle breaks away from the designated route. (e.g. if a turn is made at an intersection while the navigation provided guidance to go straight.)

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

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

## Trouble shooting

- 1. Errors which occur during the operation or installation of the device may be mistaken as a malfunction of the actual device.
- 2. If you are having problems with the device, try the suggestions listed below.
- 3. If the problems persist, contact your dealer

Problem	Possible Cause	
There are small red, blue, or green dots on the screen	Because the LCD is manufactured with technology requiring high point density, a pixel or lighting deficiency may occur within 0.01% of total pixels.	
The sound or image is not working	<ul><li>Has the Switch for the vehicle been turned to [ACC] or [ON]?</li><li>Has the SYSTEM been turned OFF?</li></ul>	
The screen is being displayed but sound is not working	<ul><li> Has the volume been set to a low level?</li><li> Has the volume been muted?</li></ul>	
When the power is turned on, the corners of the screen are dark	<ul> <li>The display appearing somewhat dark after prolonged periods of use is normal with LCD panels. It is not a malfunction.</li> <li>If the screen is very dark, contact your nearest dealer for assistance.</li> </ul>	
Sound is working from only one speaker	Are the positions of Fader or Balance sound controls adjusted to only one side?	
The external device is not working	Is the external device connected with a standard connector cable?	
When turning power on, the most recent mode screen is not displayed	Within modes that play files by reading external sources, such as USB, iPod, or Bluetooth® streaming mode, the most recently played mode screen prior to turning off power may not properly load.  If the corresponding device is not connected, the mode operated prior to the most recent mode will operate.  If the previous mode still cannot be properly played, the mode operated prior to that will operate.	

# Trouble shooting

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

# Trouble shooting

Problem	Possible Cause	Countermeasure
The sound or image	Vibration is occurring from where the conversion switch has been installed.	The sound may be short circuited and the image distorted if the device vibrates.
quality is low.	Image colour/tone quality is low.	The device will return to normal once vibrations stop.
	USB memory is damaged.	Please use after formatting the USB into FAT 12/16/32 format.
	USB memory has been contaminated.	Remove any foreign substances on the contact surface of the USB memory and multimedia terminal.
The USB does not work	A separately purchased USB HUB is being used.	Directly connect the USB memory with the multimedia terminal on the vehicle.
	A USB extension cable is being used.	Directly connect the USB memory with the multimedia terminal on the vehicle.
	A USB which is not a Metal Cover Type USB Memory is being used.	Use standard USB Memory.
	An HDD type, CF, SD Memory is being used.	Use standard USB Memory.
	There are no music files which can be played.	Only MP3, WMA file formats are supported. Please use only the supported music file formats.
The iPod is not recognised even though it has been connected	There are no titles which can be played.	Use iTunes to download and save MP3 files into the iPod.
	The iPod firmware version has not been properly updated.	Use iTunes to update the firmware version and reconnect the iPod with the device.
	The iPod device does not recognise downloads.	Reset the iPod and reconnect with the device.

## **FCC Warning**

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

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.

Caution: Any changes or modifications to this device not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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.