

GA-4640 User Manual



V1.0

Table of Contents

1. CAUTIONS	3
2. PACKAGE CONTENTS	4
3. PRODUCT FEATURES	4
4. PRODUCT SPECIFICATIONS	5
4-1 Hardware	5
4-2 GPS	6
4-3 Software	6
4-4 Certificate	6
5. PRODUCT OVERVIEW 6. GETTING STARTED	7
6. GETTING STARTED	8
6-1 Charging the Battery	8
6-2 Car Mount Installation	8
7. SOFTWARE	9
8. TROUBLESHOOTING	28
FCC NOTICES	28

1. Cautions

- One should not carry out any operation which could impair safety while driving or cycling.
- As for the operation of this product in the aircraft, please consult the aviation company first of all. Special care should be taken when an electronics device is engaged during a flight.
- Never get closer to a place emitting intensive radio waves or radiation which could affect the operation of this product.
- Never make the navigator fall down or clash with stiff objects to project it against any damage in appearance, battery loose, data lose or other hardware mutilation.
- Never let this product expose to the humid environment or rain as the water leaked into could disable it to the extent beyond reparation.
- Never switch on this product in the dusty environment.
- Over-voltage, power cable strain, bending or squeezing by heavy objects is not allowed to avoid overheating or fire disaster.
- Never deploy any chemical or detergent to clean up the navigator to prevent erosion of the surface or paintwork.
- In order to eliminate the risk of electric shock, do not touch the cable power plug with wet hands and do plunge it into the socket completely.
- Never charge the battery in a neither extreme cold nor hot place, which could damage the battery.
- Keep this product which is being charged out of the reach of children.
- Never put it under the direct baking sunshine or place it in a place with high temperature to avoid the problem of over-heat to the battery or this product, which could trigger fault or danger.
- Put this product on an even workbench instead of blanket, pillow or carpet which could build up the heat to a level so high to bring forth damage.
- When any sort of fault comes into being, please contract with qualified maintenance personnel for service rather than disassemble it at your own discretion.
- Keep all the wires in neat order to prevent damage-fostering tangling.
- Never suppress the LCD screen violently. Never bring it to the open glaring sunshine, which could damage this product. Please wipe the screen surface clean with soft cloth.
- Never cut off the power directly in the mode of navigation, music, video and image browse, which could lose data.
- When the system is reading data from or writing date into the memory card, never take out the card directly which could make the information stored in the memory card corrupted or lost or even crash the system.
- In the process of formatting, upload or download, never disconnect the power supply abruptly. Otherwise, it could lead to a problem of application error.
- Pay attention to the compatibility of multimedia files and the product can only play back the files in the stipulated formats.
- All the TV programs, music, movies and images are under the protection of copyright. Unauthorized usage is deemed as an infringement to the laws of copyright.
- For the sake of data safety, please back up the data on the SD/MMC card into the computer on a regular basis.
- Do not adjust the volume of speaker to maximum for a long time. Otherwise, it will cause audio distortion.
- The pictures presented in this manual are only for reference.

2. Package Contents

Items	Quantity
GPS Navigator	1
Car Charger	1
Bracket	1
Cradle	1
USB Cable	1
AVIN Cable	1
Data Disk	1
AC Charger (optional)	1

3. Product Features

1. Anti-reflective 4.3-inch high brightness touch screen
2. High performance 500MHz CPU
3. Built-in 2GB flash memory
4. Stereo earphone jack
5. Built-in 1W speaker
6. Built-in high performance GPS receiver
7. Built-in high sensitivity GPS antenna
8. SDHC SD/MMC Slot
9. Music Player
10. Video Player
11. Photo Viewer
12. e-Book
13. AVIN
14. Bluetooth car kit (optional)
15. Built-in rechargeable battery
16. High speed USB 2.0
17. LED indicators

4. Product Specifications

4-1 Hardware

Processor		Atlas IV 500MHz
Display	Type	Anti-reflective 4.3"high brightness LCD touch screen
	Pixel	480 x 272 (H x W)
	Color	65535 color
GPS	GPS Chipset	SiRF Atlas IV
	Antenna	Built-in high performance patch ANT
Memory	Flash	2GB
	DDR RAM	64MB
	SD/MMC	SDHC SD/MMC slot
Audio	Speaker	Mono, 1W RMS @ 8W
	Earphone Jack	2.5mm jack
	Microphone (optional)	High sensitivity, omni-directional
Power	Power Supply	5Vdc input via mini USB jack
	Battery	820mAH
AVIN	Signal Format	CVBS
	Video Format	NTSC/PAL
Bluetooth (optional)		V1.2, Class 2, with HFP
Keys		Power button, Reset, Menu button
I/O		USB v2.0
Environment	Operation Temperature	-10 °C to 60 °C (working) 0 °C to 40 °C (charging)
	Storage Temperature	-20 °C to 70 °C
	Humidity	30% to 80% non-condensing
Mechanical	Dimensions	119 x 78 x 15 mm
	Weight	161 g

4-2 GPS

Channels	64 channels
Sensitivity	Acquisition: -143dBm, Tracking: -161 dBm
Accuracy	<10 meters (2DRMS)
Velocity	0.1 m/s
Altitude	18,000 meters (60,000 feet) max
Cold Start	45 seconds average (open sky)*
Warm Start	38 seconds average (open sky)*
Hot Start	3 second average (open sky)*

*Open sky means the device should be able to see at least 7 satellites.

4-3 Software

Operation System	WINCE 6.0
Music Player	WMA
Video Player	WMV
Photo Viewer	BMP / JPG / GIF / PNG
E-book	TXT

4-4 Certificate

EMC	FCC/ CE/ BSMI
Others	RoHS

5. Product Overview



6. Getting Started

6-1 Charging the Battery

There are three methods to charge the GA-4640.

1. Charge by Using the Car Charger

Connect the GA-4640 to car cigarette lighter by the car charger provided.

2. Charge by Using the AC Charger

Connect the GA-4640 to wall outlet by the AC charger provided.

3. Charge by Using the USB Cable

Connect the GA-4640 to PC by the USB cable provided.










NOTE: Before using the GA-4640, please charge the battery for more than 8 hours to get the best battery performance.

6-2 Car Mount Installation

1. Attach the bracket to the cradle provided.
2. Clean up the windshield with a dry clean cloth.
3. Place the suction cup on the windshield and flip the lever to fix the cradle on the windshield.
4. Attach the GA-4640 to the bracket provided.
5. Loosen the swivel screws to adjust the GA-4640 to the proper position, and then tighten the swivel screws.









7. Software

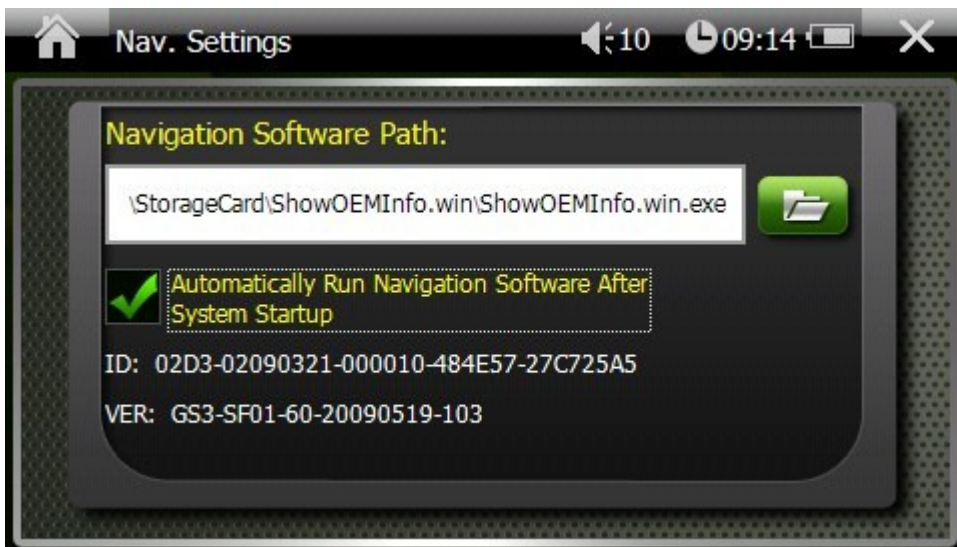


Console			
	Tap this icon to start the navigation software.		Tap this icon to enter the Settings menu.
	Tap this icon to start the Music Player application.		Tap this icon to start the Video Player application.
	Tap this icon to start the e-Book application.		Tap this icon to start the Photo Viewer application.
	Tap this icon to start the GPS monitor application.		Tap this icon to start the Bluetooth application.
	Tap this icon to go to the next page.		







Settings









	Tap this icon to enter the Nav. Settings menu.		Tap this icon to view the system information.
	Tap this icon to enter the Preferences setting menu.		Tap this icon to enter the Clock menu.
	Tap this icon to start the touch screen calibration.		Tap this icon to enter the USB menu.
	Go back to the Console.		Go back to the Console.



Nav. Settings

	Tap this icon to set the path of the navigation software.		Check this box to enable auto-run function.
	Go back to the Console.		Go back to the Settings menu.

Preferences

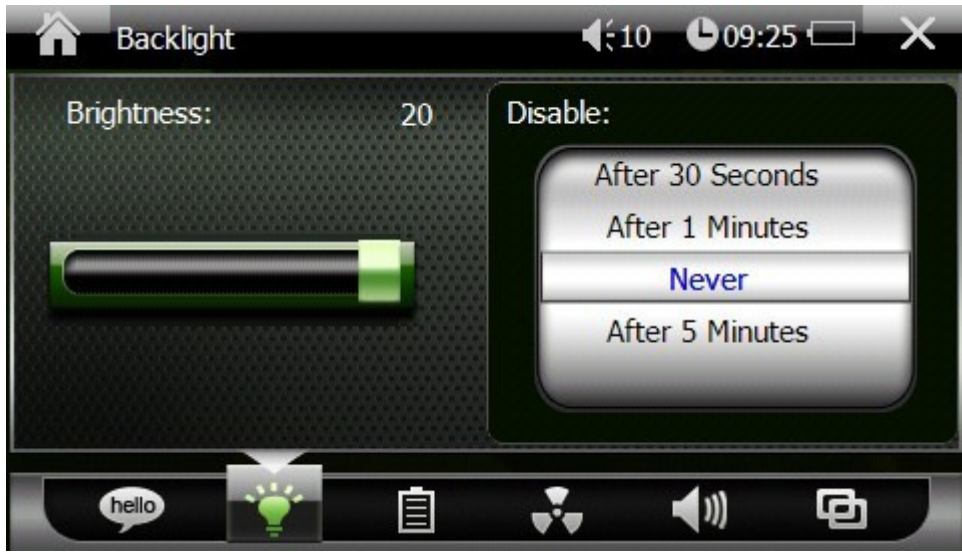
	Tap this icon to set language.
	Tap this icon to set backlight.
	Tap this icon to set power management mode.
	Tap this icon to set switch effect.
	Tap this icon to set volume.
	Tap this icon to set UI style.
	Go back to the Console.
	Go back to the Settings menu.






Language

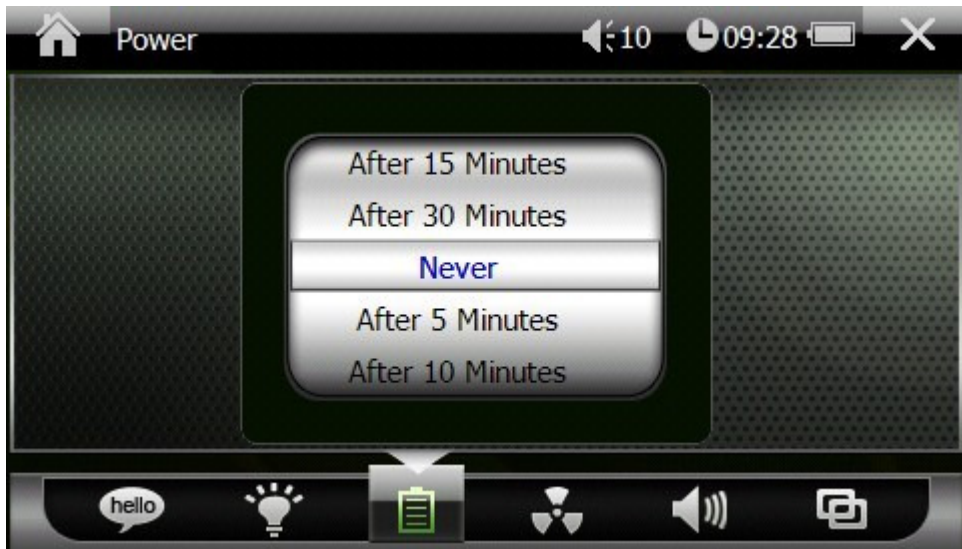
Roll the menu to select the language.

	
Go back to the Console.	Go back to the Settings menu.



Backlight

	Slide on the brightness bar to adjust brightness.	Disable	Select the backlight turn-off time.
	Go back to the Console.		Go back to the Settings menu.



Power

Roll the menu to select power management mode.



Go back to the Console.



Go back to the Settings menu.



Switch Effect

Roll the menu to select the switch effect.







Go back to the Console.



Go back to the Settings menu.



Volume

	Tap this icon to mute or resume the sound.		Slide on the volume bar to adjust device volume.
Key Sound	Roll the menu to select key sound.		
	Go back to the Console.		Go back to the Settings menu.








Style

Roll the menu to select UI style.			
	Go back to the Console.		Go back to the Settings menu.





Clock

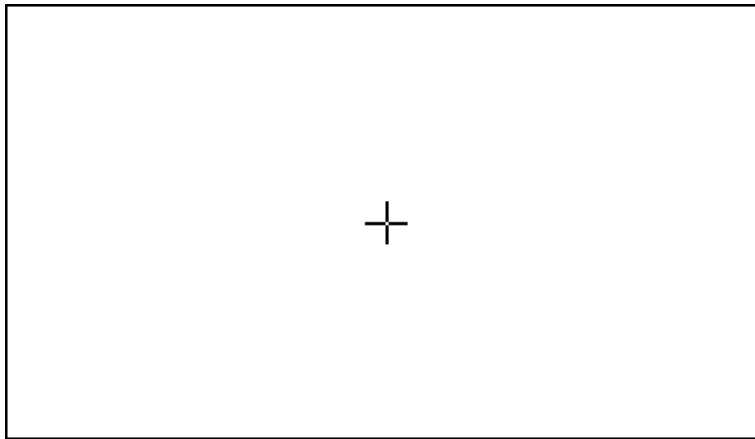
	Tap the right or the left arrow to set month and year.		Tap the right or the left arrow to set hour and minute.
	Tap a certain date on the calendar to set date.		
	Go back to the Console.		Go back to the Settings menu.



System

Check the system information including Device ID, Software Version, RAM Memory, ROM Memory, and OS Version.

	Go back to the Console.		Go back to the Settings menu.
---	-------------------------	---	-------------------------------



Touch Screen

Calibrate the touch screen by tapping the cross mark.



USB

Scroll the menu to select USB connection mode.















Go back to the Console.

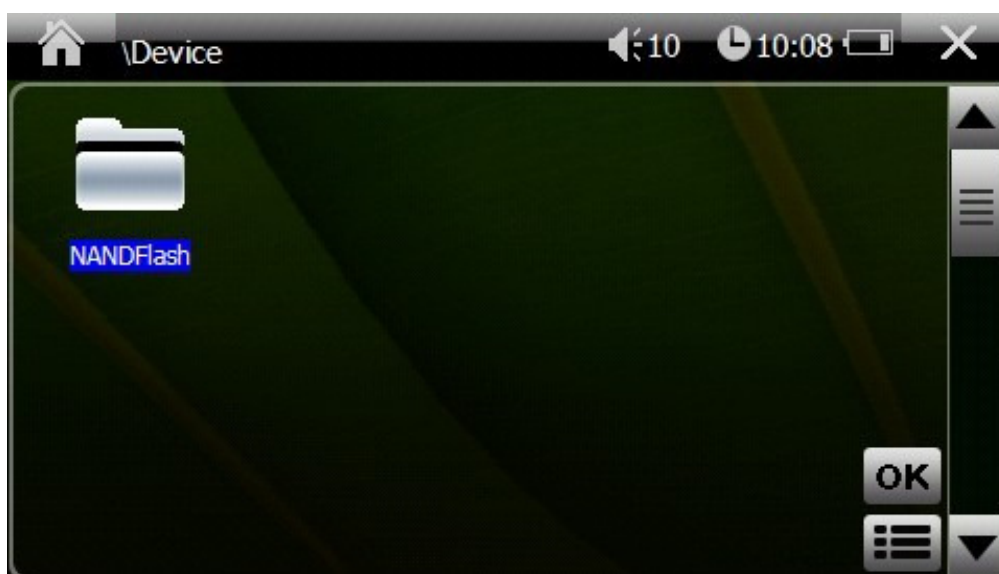


Go back to the Settings menu.







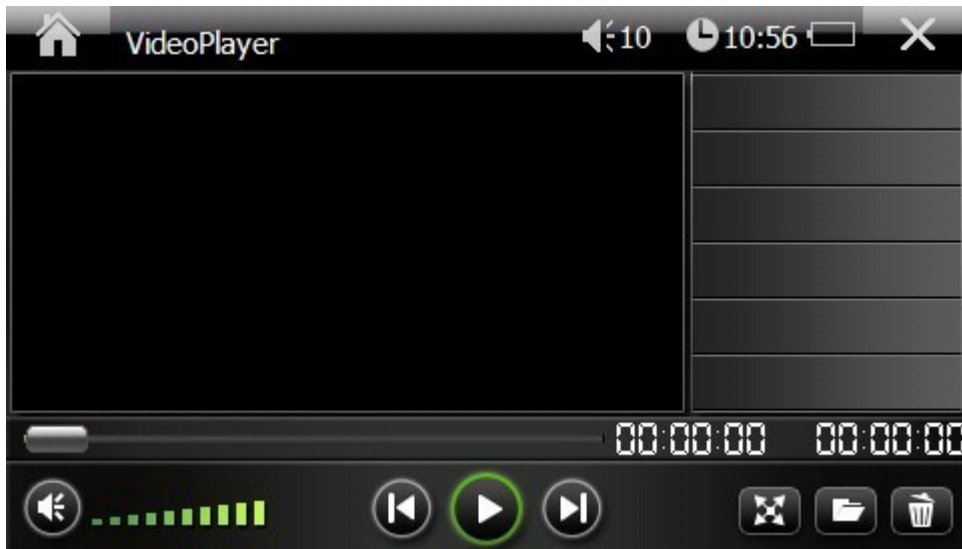
Music Player

	Tap this icon to start playing.		Tap this icon to pause playing. °
	Tap this icon to play next sound track.		Tap this icon to play previous sound track.
	Play by following the order of the playlist.		Play by random order of the playlist.
	Tap this icon to mute the sound.		Tap this icon to resume the sound.
	Edit playlists.		Delete sound tracks from the playlist.
	Go back to the Console.		Exit the Music Player program.














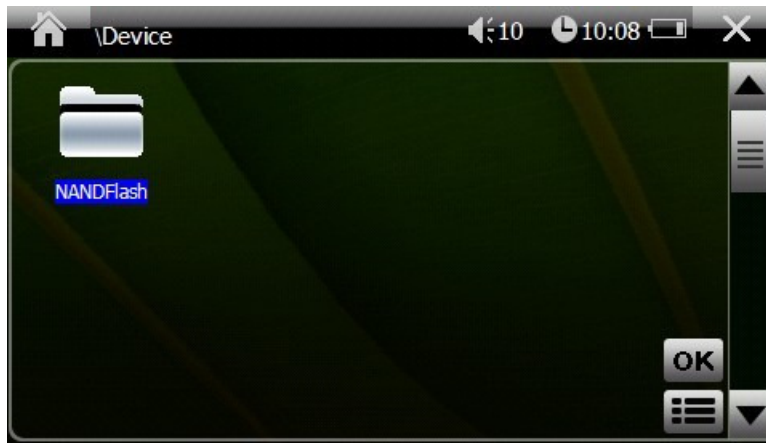
Edit Playlist

	Select files to be added to the playlist.		Confirm playlist editing.
	Go back to the Console.		Exit the playlist edit menu.







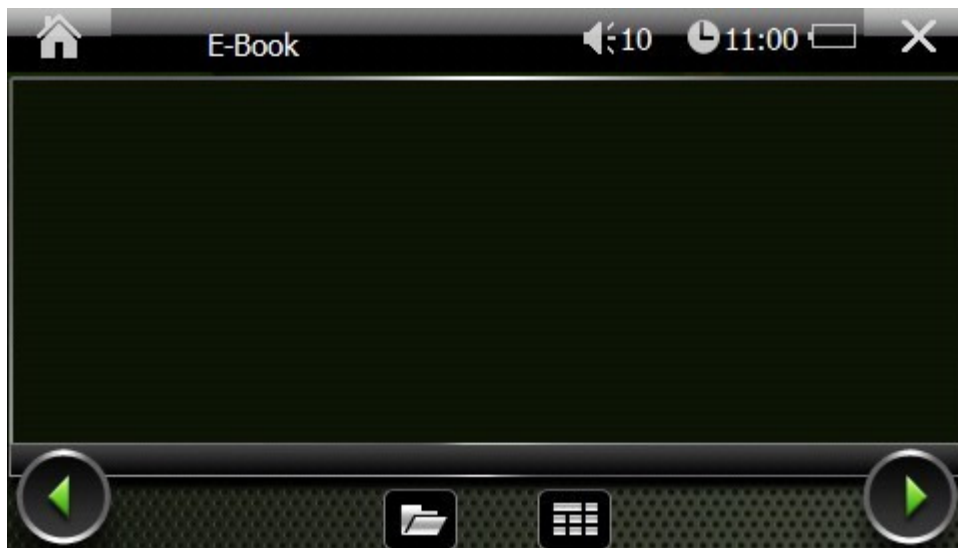
Video Player

	Tap this icon to start playing.		Tap this icon to pause playing.
	Tap this icon to go to play next video clip.		Tap this icon to go to play previous video clip.
	Tap this icon to enter full screen mode.		Tap this icon to mute the sound.
	Tap this icon to resume the sound.		Edit playlist
	Delete all files from the playlist.		Go back to the Console.
	Exit the Video Player application.		









Edit Playlist

	Select files to be added to the playlist.		Confirm playlist editing.
	Go back to the Console.		Exit the playlist edit menu.



E-Book

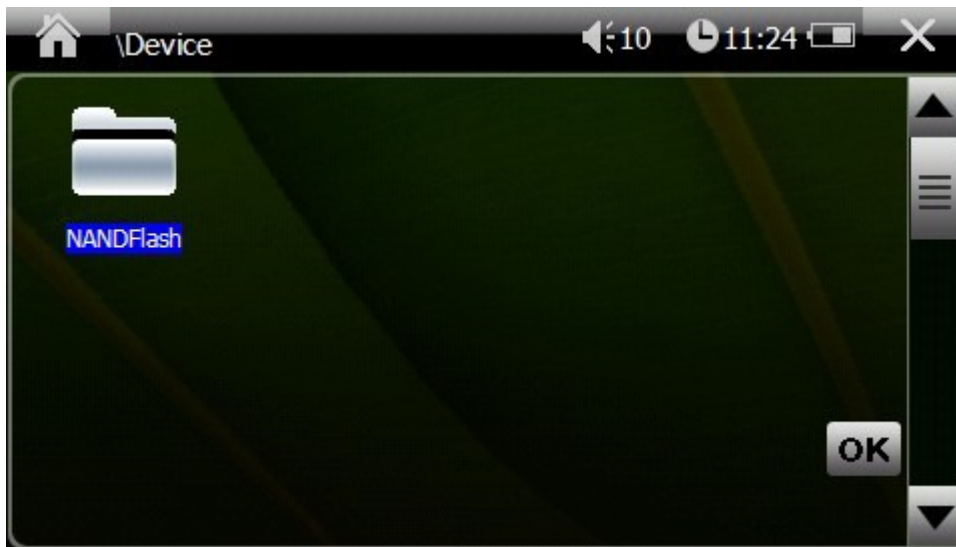
	Tap this icon to open files.		Go to previous page.
	Go to next page.		Go to selected page.
	Go back to the Console.		Exit the e-Book program.



Page Select

Enter the page number and tap  to read the selected page.

	Go back to the Console.		Exit the Page Select.
---	-------------------------	---	-----------------------



Open Files

	Confirm the file selected.		
	Go back to the Console.		Exit the Open Files menu.

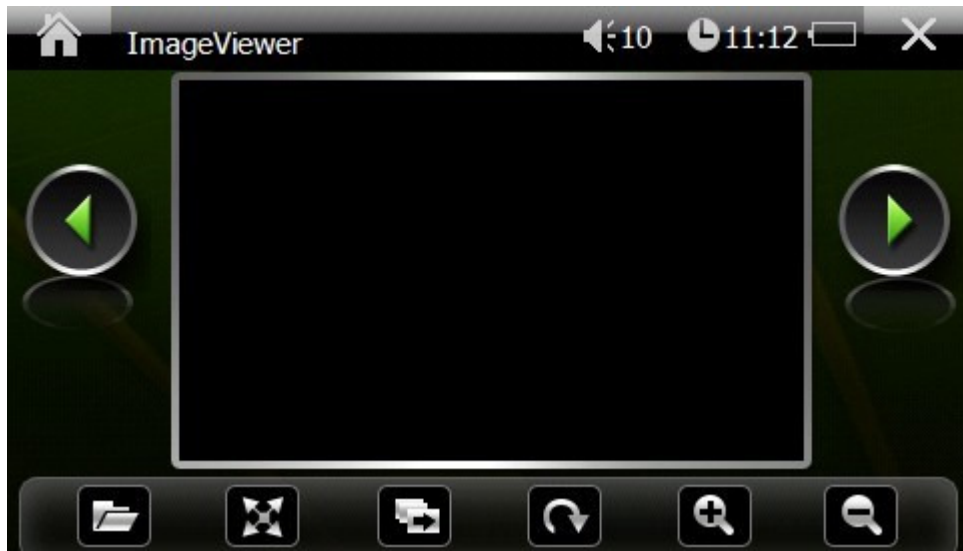










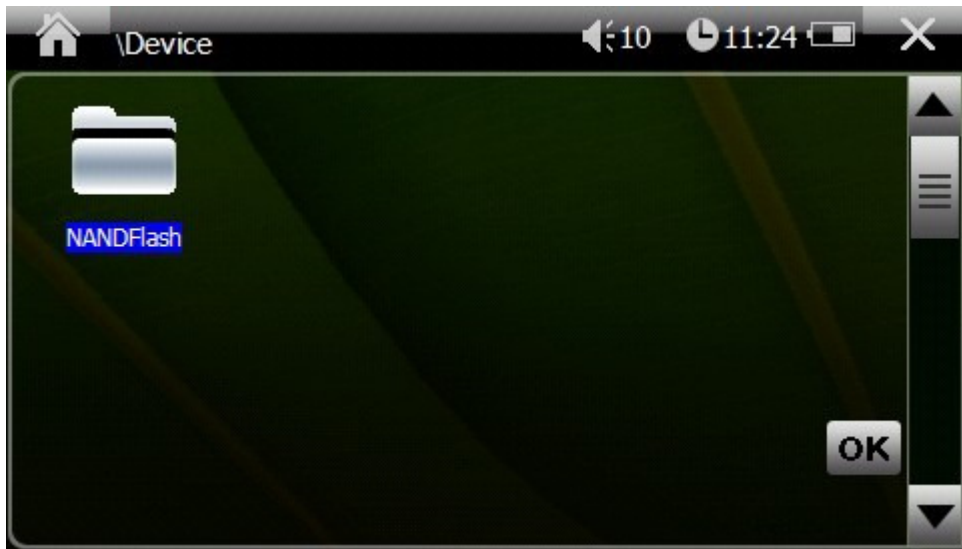


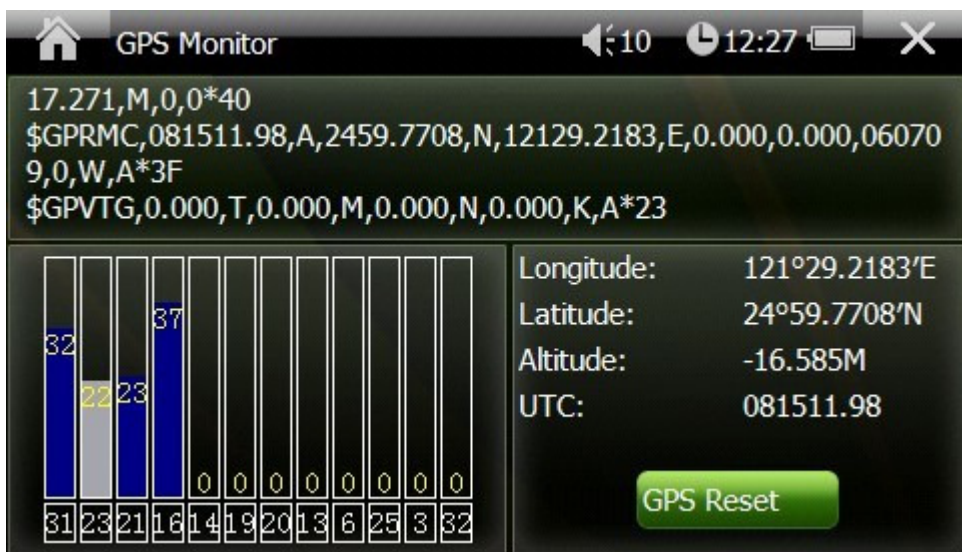
Image Viewer

	Previous photo.		Tap this icon to enter full screen mode.
	Tap this icon to start the slide show mode.		Tap this icon to rotate the photo clockwise by 90 degree.
	Zoom out.		Zoom in.
	View previous photo.		View next photo.
	Go back to the Console.		Go back to the Console.



Open Files

	Confirm the file selected.	
	Go back to the Console.	
		Exit the Open Files menu.











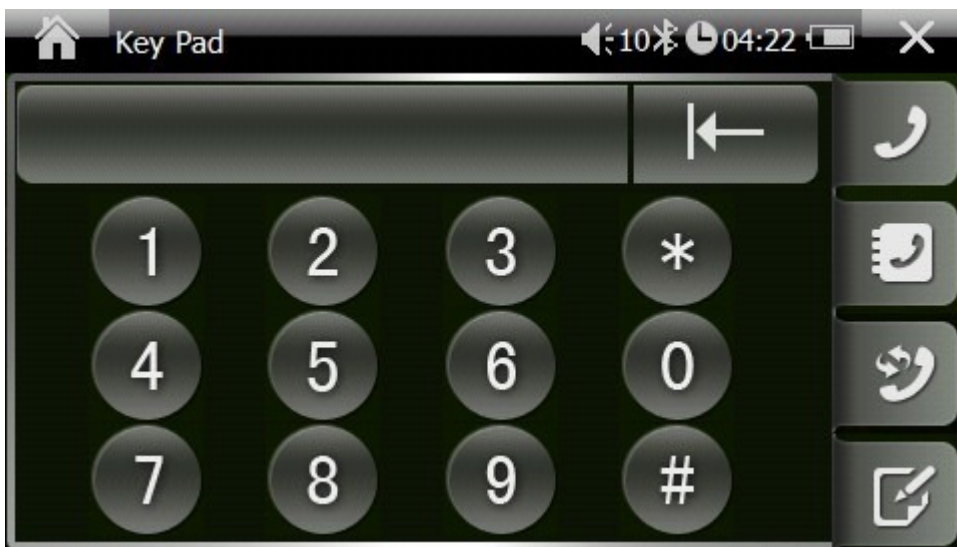
GPS Monitor

	Tap this icon to reset the GPS receiver.	
	Go back to the Console.	
		Go back to the Console.




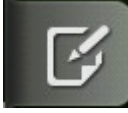




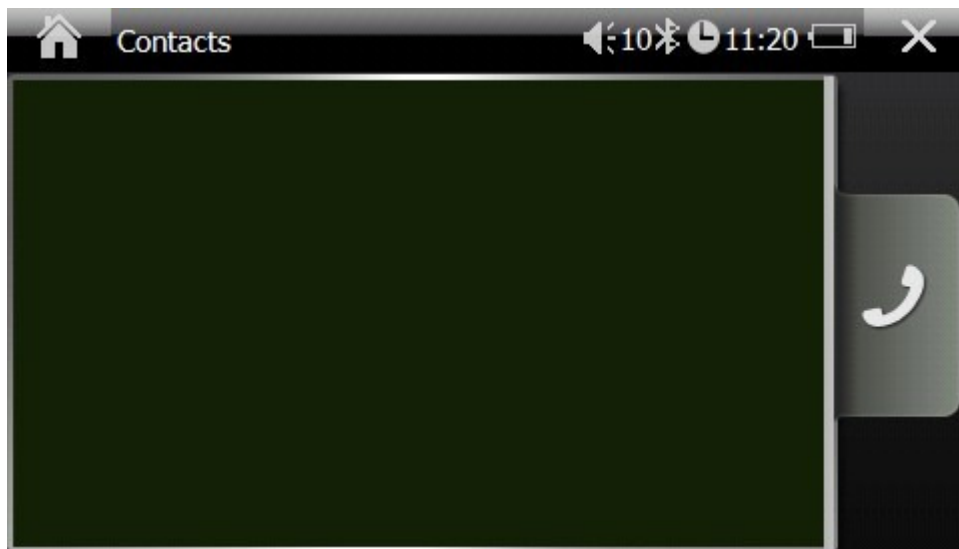
Bluetooth

	Tap this icon to start the dialing key pad.		Tap this icon to view contacts.
	Tap this icon to view recent calls.		Tap this icon to enter the Bluetooth setting menu.
	Tap this icon to view pairing record.		Tap this icon to start pairing.
	Go back to the Console.		Go back to the Console.

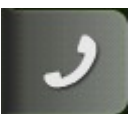




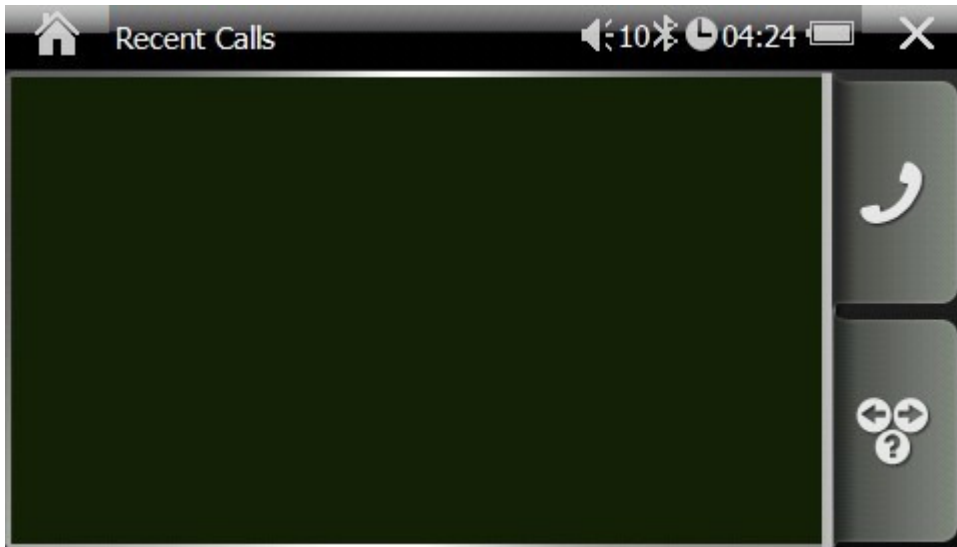
Key Pad

	Tap this icon to dial out.		Tap this icon to view contacts.
	Tap this icon to redial the last call.		Tap this icon to view recent calls.
	Go back to the Console.		Go back to the Bluetooth menu.



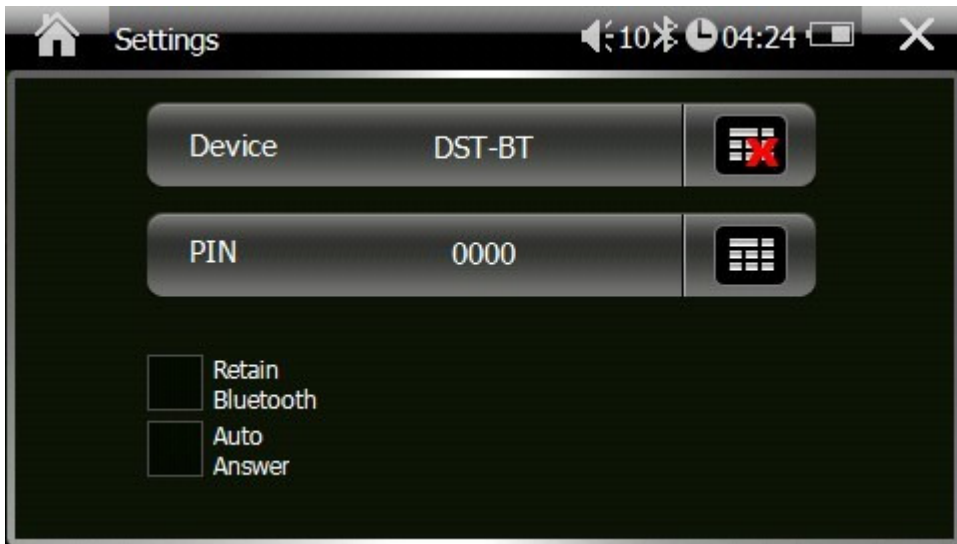
Contacts

	Tap this icon to dial out.		
	Go back to the Console.		Go back to the Bluetooth menu.





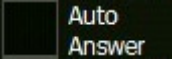


Recent Calls

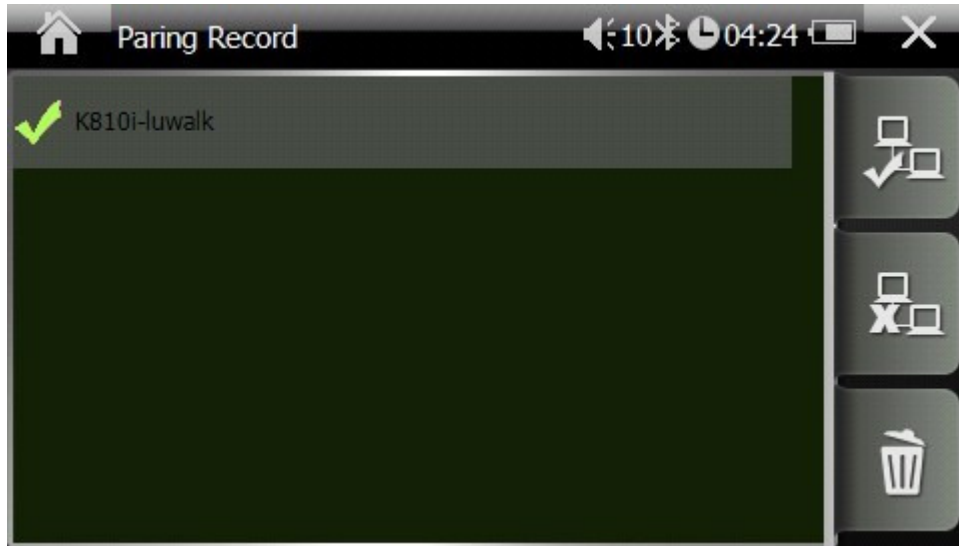
	Tap this icon to dial out.		Tap on this button switch between pages of missed calls, received calls, and dialed calls.
	Go back to the Console.		Go back to the Bluetooth menu.








Setting

	Tap this icon to enter PIN code.		Check the box to enable Retain Bluetooth.
---	----------------------------------	--	---

	Check the box to enable Auto Answer.		
	Go back to the Console.		Go back to the Bluetooth menu.

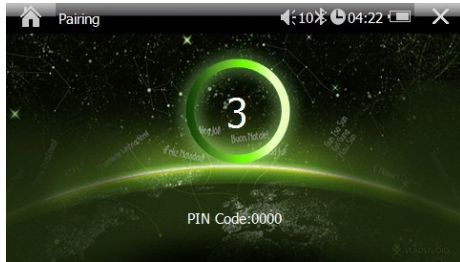


Pairing Record			
	Connect to the selected device.		Disconnect current connection.
	Delete all pairing records.		
	Go back to the Console.		Go back to the Bluetooth menu.

Pairing



Before the Bluetooth connection is established, Key Pad, Contacts, and Recent Calls are disabled.



Tap Pairing to start pairing mode. Then use your cell phone to connect to your GA-4640 to establish Bluetooth pairing. If the pairing doesn't established within 60 seconds, the GA-4640 will leave pairing mode automatically.



Once the connection is established, the Key Pad, Contacts, and Call Records will be activated.



Go back to the Console.



Go back to the Bluetooth menu.

8. Troubleshooting

Problem	Solution
My GA-4640 cannot get GPS signals.	Take the GA-4640 outdoors and away from tall buildings and trees. Remain stationary for several minutes to get the necessary GPS information from satellites.
The suction cup cannot stay on my windshield.	Clean the suction cup and windshield with a clean, dry cloth. Then mount the suction cup as described in section 5-2.
I cannot turn on my GA-4640.	Check if the battery is charged.
My phone cannot connect to my GA-4640.	Make sure the Bluetooth on both your phone and the GA-4640 is turned on. Then follow the instructions in the user manual.
The AVIN function is not working.	Make sure the cable is fully plugged in the correct jack.
The system encounters fatal errors and crashed.	Push the reset button to restart the system.
The images or sound tracks or video clips cannot be played on my GA-4640.	Please check the software specifications on the page 7 to see if the media formats are supported by the GA-4640.

FCC Notices

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.

FCC RF Exposure requirements:

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.