

# Drive GPS 135 Portable Navigation Device

## User's Manual



User Instructions for Operating  
the Pharos Drive GPS 135

# Legal Notices

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Pharos Drive GPS 135 User's Manual

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**NOTE:** Record the device ID, serial number, purchase date, and place of purchase information in the space provided below. The serial number is indicated on the label affixed to your Pharos device. All correspondence concerning your unit should include the serial number, device ID, and purchase information.

**NOTE:** Information in this manual is subject to change without notice.

## Revision: 1.00

October 2006

## Warnings and Notices

For your safety, do not operate the controls of the product while driving.

GPS satellite signals cannot typically pass through solid materials (except glass). GPS location information is not typically available inside buildings, tunnels, or underground parking lots.

A minimum of four GPS satellite signals are needed to calculate your GPS position. Signal reception can be affected by weather events or overhead obstacles (e.g. dense foliage and tall buildings).

Other wireless devices in the vehicle may interfere with the reception of satellite signals and cause the reception to be unstable.

## Adapter

Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

Do not use the adapter if the cord becomes damaged.

Connect the adapter to the proper power source. The voltage requirements are found on the product case and/or packaging.

## Battery

This unit contains a non-replaceable internal battery. The battery can burst or explode, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush, puncture, or dispose of in fire or water.

Use only the specified charger approved by the manufacturer.

**WARNING:** The battery in the device must be recycled or disposed of properly.

**WARNING:** Try not to expose the Drive GPS 135 to extreme temperatures for long periods of time.

## FCC Warning

The Drive GPS 135 PND has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device generates, uses, and can radiate radio-frequency energy. If it is not installed and used properly, it may cause interference with radio and television reception.

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# Chapter 1 Drive GPS 135 PND Features and Specifications

## 1.1 Pharos Drive GPS 135 PND features

The Pharos Drive GPS 135 Portable Navigation device is a powerful multifunction GPS navigation and entertainment device.

- Compact size and lightweight
- Integrated GPS receiver for GPS navigation
- Embedded SD card slot ensuring ample data storage for mapping and application software
- Incorporates high-performance GPS antenna
- High-resolution color LCD
- 3.5" touch screen

## 1.2 Drive GPS 135 Specifications

**Table 1: Drive GPS 135 dimensions and specifications**

Category	Item
Overall Dimensions (w/o antenna)	77 x 134 x 27 mm
Weight (incl. battery)	215g
<b>Hardware Main Unit</b>	
CPU	Samsung S3C2410, 266 MHz, ARM compatible
NAND Flash	32MB, Up to 1GB
RAM	64MB
Control	4 Touch keys
Navigation Pad	Touch screen
Indicators	Green/red for power
Headphone Jack	3.5 mm, stereo

**Table 1: Drive GPS 135 dimensions and specifications**

Category	Item
Memory Extension	SD Memory Slot
Display	3.5" Touchscreen, 320 x 240 pixel, TFT, 16.7M colors
Connectors	MiniUSB, external GPS-antenna, external TMC antenna, SD slot
USB Interface	USB v1.1
<b>Software</b>	
Functions	Image viewer, audio playback, navigation, RDS-TMC (optional)
OS	Windows CE 4.2
<b>Main Battery</b>	
Type	Rechargeable Li-Polymer
Voltage/Capacity	3.7V, 2000mAh
Runtime (GPS on, Back-light on)	About 4h (typical)
Charge Time	4.5 hours
First Time Charging	8 hours
<b>GPS</b>	
Chipset	SiRF GSC3
Antenna Type	Patch antenna

**Table 1: Drive GPS 135 dimensions and specifications**

<b>Category</b>	<b>Item</b>
Cold Start (very first start time)	45 sec (typical)
Warm Start (after fix and power-off >= 4hrs)	35 sec (typical)
Hot Start (after fix and power-off < 4hrs)	1 sec (typical)
<b>Car Adapter</b>	
Input Rating	12-24V
Output Rating	5.0V, 2A
Power Indicator	Blue, non-blinking
Certificates	eMark
<b>AC Adapter</b>	<b>(Optional)</b>
AC-Rating	110-240V, 50-60Hz
DC-Rating	5.0V, 2A
Certificates	CE, FCC, TUV
Protection Class	II, LPS
<b>USB Activesync Cable</b>	
Extras	Capable of charging via USB

## Chapter 2 Getting Started

This chapter describes the hardware interface of the Pharos Drive GPS 135 and its peripherals. Instructions for setting up the device and some basic system operations are also discussed.

**NOTE:** Although the Drive GPS 135 Li-Polymer rechargeable battery comes approximately 30% charged, before using, it is best to connect the AC adapter and plug to power socket and fully charge the battery 8 hours.

### 2.1 Hardware overview

This section introduces the Drive GPS 135 external features and hardware components.

#### 2.1.1 Packing list

The Pharos Drive GPS 135 box contains all of the items listed below:

- Drive GPS 135 Portable Navigation Device
- Car mount kit
- Car charger
- USB cable
- User documentation
- Drive GPS 135 Portable Navigation Device Companion CD
- Drive GPS 135 Portable Navigation Device Quick Start Guide
- Drive GPS 135 Portable Navigation Device Warranty Booklet
- Carrying bag

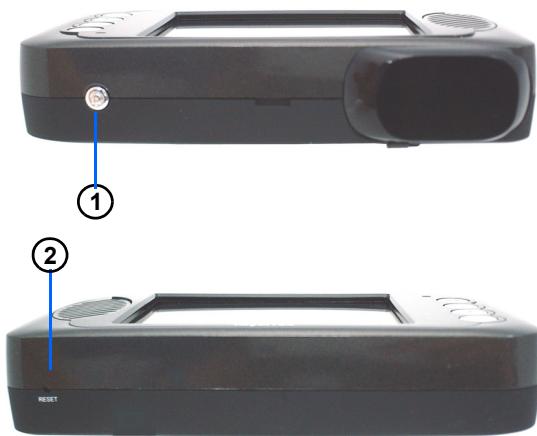
#### 2.1.2 Front Panel

**Figure 1: Front Panel View**

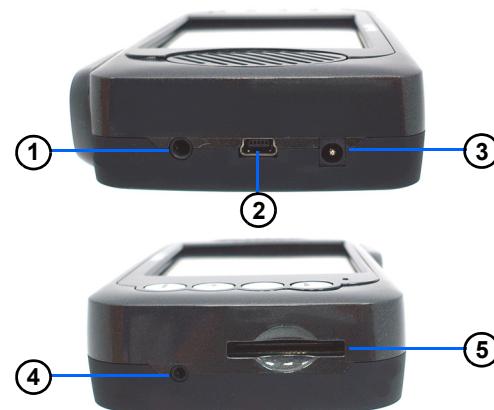


**Table 2: Front panel controls**

No.	Function	Description
1	Navigation Software	Shortcut to navigation
2	SD slot	SD slot
3	To Main Menu	Shortcut to main menu home
4	Zoom in Navigation	Zooms in view in navigation mode
5	Zoom out Navigation	Zooms out view in navigation mode
6	Speaker	Speaker

**Figure 2: Top and Bottom view****Table 3: Top and Bottom controls**

No.	Function	
1	On/Off	The main power/battery on/off switch.
2	Reset	Restarts your device with a soft reset.

**Figure 3: Left and Right side view****Table 4: Left and Right panel controls**

No.	Function	
1	Earphone	Standard 3.5" earphone jack.
2	USB input	Connects to the USB cable.
3	DC Power input	For Adapter or car charger
4	FM/TMC antenna	For FM/TMC reception (applicable depending on SKU)
5	SD slot	Accepts a SD (Secure Digital) card for data storage.

**WARNING:** Make sure the SD card is properly inserted and DO NOT remove the SD card during operation of the device.

## 2.2 Mounting the Drive GPS 135 in your vehicle

The Drive GPS 135 comes with a car mount kit and a car charger to help install your device in your vehicle. The car mount kit uses a suction cup on the windshield to offer flexible mounting options for the Drive GPS 135.

**WARNING:** Some countries prohibit the mounting of any electronic device on the vehicle dashboard. Be sure to check your local laws for acceptable mounting areas before installing the car mount bracket. Please check all local laws before setting up the navigation device in any vehicle.

Occasionally, GPS signal reception is obstructed when the device is mounted in the car. In this case, an external GPS antenna is needed to connect to the device. The antenna connector is located at the top back part of the Drive GPS 135.

### 2.2.1 To set up the device on your vehicle:

This section shows how to install the car mount kit in your vehicle's windshield using the suction cup. The Drive GPS 135 uses a snap on mounting cradle to use when the device attaches to the car mount. Below is the backside view of the Drive GPS 135 in the cradle.

Figure 4: Drive GPS 135 mounting cradle with slots for car mount



### 2.3 Using the mounting bracket.

1. Clean the mounting surface with a glass cleaner and a clean cotton cloth.
2. If the ambient temperature is below +15°C (60°F), you can warm the mounting area and the suction cup (e.g. with a hair dryer) to ensure a strong suction bond.
3. Install the car mount on the selected area.
  - a. Fix the suction cup to the selected area with the locking lever facing up for easier access.
  - b. Flip the locking lever away from you to create a vacuum between the suction cup and the window surface.Make sure that the suction is strong and stable before proceeding to the next step.
4. Slide the Drive GPS 135 cradle bracket onto the device connector mount.
5. After you are sure the mounting bracket is safe and secure, attach the Drive GPS 135 into its cradle bracket. It snaps in easily with the quick release connectors.
6. Adjust the car mount for the best viewing angle.
7. Connect the car charger into the cigarette lighter receptacle.

8. The car charger LED indicator will glow blue when powered.
9. Plug the car charger into the side of the Drive GPS 135 and position the cord to an appropriate location.

**NOTE:** Your car may be required to switch the vehicle ignition into the accessories position to power the cigarette lighter. Your Drive GPS 135 will not charge with the ignition off.

**Figure 5: Power cord plugs into lighter**



**NOTE:** The car mount included may look different than the ones shown in this user's manual. However, the operation is similar.

**WARNING:** Try not to expose the Drive GPS 135 to extreme temperatures for long periods of time.

# Chapter 3 Using the Drive GPS 135

## 3.1 Drive GPS 135 Operating Basics

After fully charging the Drive GPS 135, it is ready to be used. You can now turn it on to calibrate the screen. After screen calibration, proceed to system settings configuration.

### 3.2 To turn on and calibrate the device:

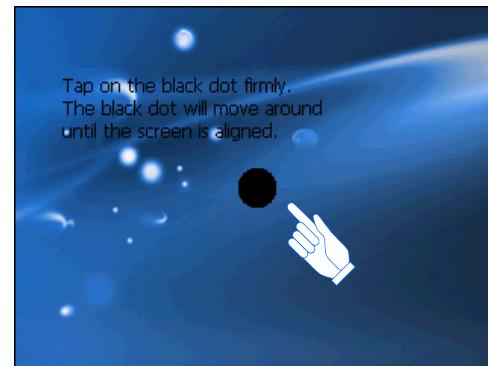
1. Turn on your device the first time by turning on the main on/off switch on the top of the device. You will use this power button for daily use.

**Figure 6: Main on/off switch and power button**



**NOTE:** When you first turn on your device, you will be asked to calibrate the screen. This process ensures the accuracy of the touchscreen when used.

2. Tap the center of the target as it moves around the screen.



After calibrating the screen, the Main Menu panel displays.



### 3.3 To configure system settings:

If you intend to start using your Drive GPS 135 at once, we recommend that you configure the language and date/time settings first. The rest of the user preferences can be set up later.

1. Tap “System” in the Main menu.
2. Tap “Language” on the System Menu panel.



**NOTE:** The controls are easy to use when configuring your device.

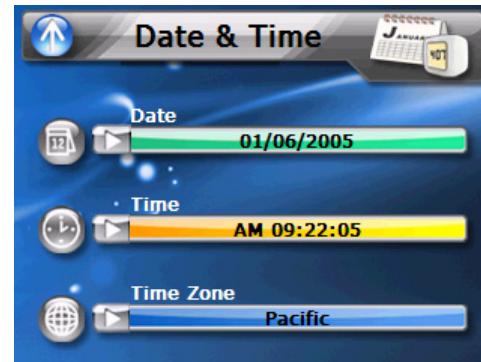
1. Tap the “Arrow” tab to select an item.
2. Tap the +/- tab to increase or decrease values.
3. Tap on the return Arrow in the top left corner to:
  - a. Return to the previous screen.
  - b. Save the settings just input.

3. To set the system language settings, tap the forward or backward arrow until the language you want appears.

4. Tap the Up Arrow in the top left to set the language and return to the System Menu.



5. To set the system date and time, tap on the Date arrow, Time arrow and Time Zone arrow in the Date & Time System Menu.



6. Tap the correct Year, Month and Day by tapping on the + or -.
7. Tap the Up Arrow in the top left to set the Date and return to the “Date & Time” Menu.



8. Tap the “Time” in the “Date & Time” Menu. You will see the window below. Select the correct time by tapping on the + or -.



9. Tap the Up Arrow in the top left to set the Time and return to the “Date & Time” Menu.

10. Next, tap “Time Zone” in the “Date & Time” Menu. Select the correct Time Zone by tapping on the left and right arrows.



11. Tap the Up Arrow in the top left to set the Time Zone and return to the “Date & Time” Menu.
12. Tap the Up Arrow in the top left of the “Date & Time” Menu to return to the System Menu.

### 3.4 Additional System settings

Other System setting can be used to view and adjust your device current preferences. Navigate from the System Menu.



### 3.5 Backlight

1. Tap the Backlight icon in the System Menu.
2. Adjust the Backlight brightness.
3. Adjust how long you want to wait before Backlight goes into power savings mode while using battery power source.
4. Adjust how long you want to wait before the Backlight goes into power savings mode while using an external power source (AC adapter/Car adapter).
5. Tap the Up arrow to return to the System Menu.

### 3.6 Volume

1. Tap the Volume icon in the System Menu.
2. Tap + or - to set default system sound volume.
3. Tap the Up arrow to save and return to the System Menu.



### 3.7 Battery

1. Tap the Battery icon in the System Menu.
2. You can view the remaining battery power in the top bar.
3. Adjust how long you want to wait before the Hot Key LEDs turn off automatically.



**NOTE:** Check Hot Keys backlight (LED) turn on when pressed. To conserve battery power, these settings should be set to lowest values.

### 3.8 System Information

1. Tap the System Info. icon in the System Menu.
2. You can view the OS version, GPS firmware version and other system information.

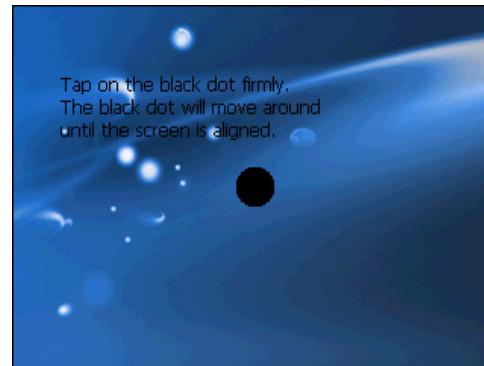


3. Tap the “Calibration” icon in the System Info.

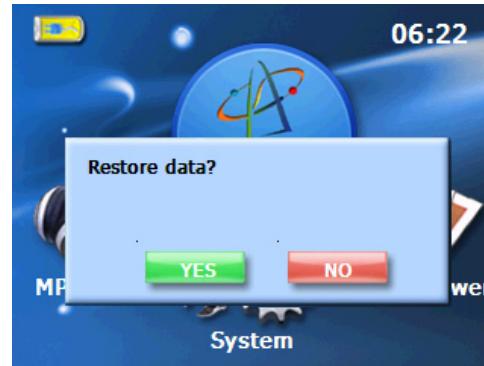
**NOTE:** Why perform a GPS reset?

If the previous GPS fix position was more than 500 km or 12 hours apart from your current position and time, it will take significantly longer than the standard TTFF time to get a GPS fix. This is due to the nature of the GPS algorithm and rotational velocity between the satellites and planet Earth, and deemed normal. Perform a GPS reset in the main menu to get a faster GPS fix.

4. You can calibrate the device from this screen.



5. For Factory reset, a screen will appear confirming you want to reset your device.



# Chapter 4 Synchronization with a PC

## 4.1 Exchanging data between the Drive GPS 135 and your PC

### 4.1.1 Using the SD slot

The Drive GPS 135 has an SD slot compatible with a range of SD storage cards that you can use to back up or transfer files and data.

Along with photos, music and videos, the GPS navigation system program is also stored on the storage card. To install and use maps, the program requires that users load the digital maps available in the GPS Navigation SD card that supports the device.

**Figure 7: SD card slot**



### 4.1.2 To insert a storage card:

Hold the device securely, then push the card into the slot until you hear an audible system sound; this will signal that the card is already properly seated within the slot. The card is secure when it is not protruding from the slot.

### 4.1.3 To remove a storage card:

1. Hold the device securely, then push against the top of the card, as if you were pushing it further into the slot, letting the card spring out. An audible system sound will signal that the card has been released.
2. Gently remove the card from the slot.

### 4.1.4 Establishing device-PC connection

The USB cable that comes with your device enables you to connect the device to your computer. File Explorer displays the Drive GPS 135 device, with the SD card shown as a sub-folder. Once connected, you can use File Explorer to copy digital music and image files into your device's SD card and access them when in Entertainment mode.

- It is advisable to organize files into subfolders. These subfolders will become play lists and help you to manage and better access the files on your device.
- To enable access of multimedia files from your device, the files should be located on the SD card.

## 4.2 Installing Microsoft ActiveSync

Use Microsoft ActiveSync to exchange information between your Drive GPS 135 and a computer running on the Microsoft Windows platform.

If you have a previous version of the Microsoft ActiveSync installed in your computer, uninstall it first before installing the Microsoft ActiveSync from the Drive GPS 135 Companion CD.

### 4.2.1 Minimum installation requirements:

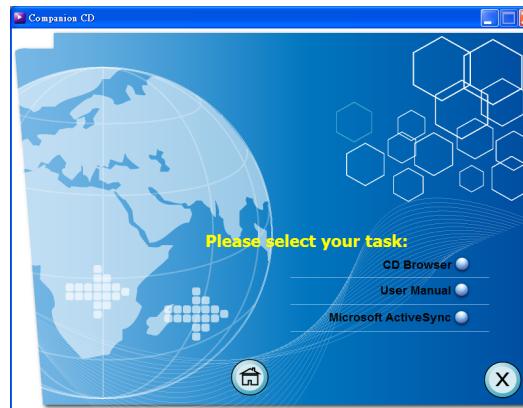
- Microsoft Windows XP, 2000, ME, and 98 SE
- Microsoft Internet Explorer 5.0 or later
- Hard disk drive with 12 to 65 MB of available hard disk space
- Available USB port
- CD-ROM drive
- VGA graphics card or compatible video graphics adapter at 256 color or higher

### 4.2.2 To install Microsoft ActiveSync on your computer:

1. Close any open programs, including those that run at startup, and disable any virus-scanning software.
2. Insert the Pharos Drive GPS 135 Companion CD into your computer's CD-ROM drive. The CD's welcome page should appear.
3. Click the installation language of your choice.



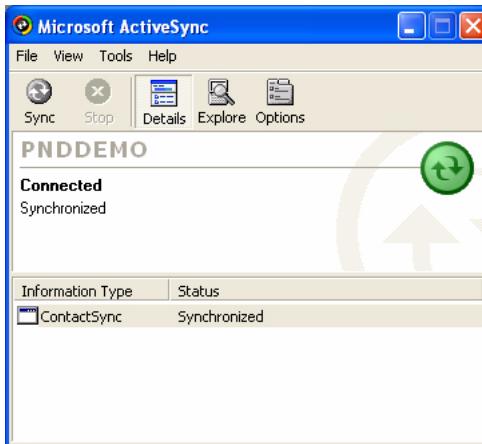
4. Click Install ActiveSync on the Please select your task screen.



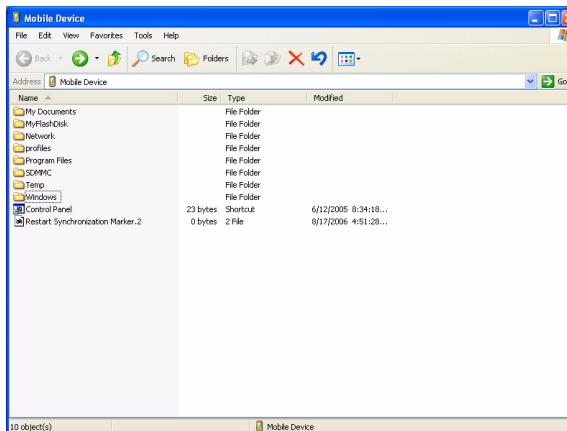
The installation wizard will automatically begin.

## 5. Follow the on-screen instructions.

After installation, the ActiveSync icon will appear on your computer's system tray (on the lower right-hand corner of the screen).



You can also use Explore in Activesync to look at all the content on your device (as shown below).



Once ActiveSync is installed on your computer, you can use it to transfer files (i.e. MP3 files/photos) between your device and your computer.

For more detailed information on how to use ActiveSync on your computer, start ActiveSync on your computer, click Help, then Microsoft ActiveSync Help.

# Chapter 5 Entertainment

## 5.1 Drive GPS 135 Player

The Drive GPS 135 is a fully capable multimedia player that can enhance your portable entertainment. In addition to its navigating function, the Drive GPS 135 is also a mobile entertainment tool that lets you enjoy digital music, and view photos. These functions make the Drive GPS 135 a true multimedia device.

To enable access of multimedia files from your device, the files should stored on the SD card. To transfer these files, do either of the following:

- Using the USB cable to connect the device, with the SD card inside, to your computer, then use File Explorer to copy digital music and image files into the device's SD card folder. The Drive GPS 135 should be recognized with the SD card shown as a sub-folder.
- Using a compatible card reader, directly copy digital music and image files to the SD card.

It is recommended to organize files into subfolders. These folders will makes files easier to find and play.

## 5.2 Using the different media players

### 5.3 MP3

Enjoy your favorite music on the road. The program features:

- Support for MP3, WMA, and WAV files
- Auto-scanning of supported files in the device's SD card
- Hot key function for volume control
- Playlist support based on sub-directory contents

Each sub directory containing compatible music files is treated as an individual playlist. For a more organized file search, it is advisable to named sub directories based on genre or listening preferences.

#### 5.3.1 Using the MP3 player.

#### 5.3.2 To enter into the different media players.

1. Tap the MP3 icon in the Main Menu.



2. Tap “MP3 Player” in the Entertainment menu.

**NOTE:** You can also enter the MP3/music player by pressing the music hot key on the front panel.

3. The MP3 player window below controls playback.



4. File collection menu.



Table 5: MP3 player functions

No.	Function	Description
1	Repeat	Repeats the selection
2	Random play	Plays files random order
3	File collection/playlist	Goes back to main file/folder view
4	Skip backwards/forwards	Advances one song forward or backward
5	Pause/Stop	Stops play

## 5.4 Photo Viewer

The Drive GPS 135 has a great photo viewing option that makes it easy to share and view digital photos anywhere on the go. The program features:

- Support for JPEG and BMP (1, 4, 8, and 24-bit) files
- Auto-scanning of supported files in the device's SD card.
- Three viewing modes: Thumbnail, Full Screen, and Slide Show
- Album support based on sub-directory contents

Each subdirectory can hold multiple images and be used as an individual album. For a more organized file search, it is advisable to sort image files into sub directories based on meaningful name or date. An example could be "summer vacation pictures" or "New baby" or "2005 Best."

### 5.4.1 Viewing files in Slide Show mode

You have the option to view images in a slide show much like viewing a Power Point presentation in your computer. Images are adjusted to fit the entire display area and are shown in a 3-second interval.

### 5.4.2 Using the Photo Viewer



**Table 6: Photo Viewer Menu**

No.	Function	Description
1	Slideshow viewer	Starts slideshow
2	Go up to Folder level	Goes up one folder level
3	Move selection up	Moves selection up
4	Move selection down	Moves selection down

5. To enable the Slide Show mode: In Thumbnail or Full Screen mode, tap Slide Show. #1 above

**Table 7: Photo Viewer functions**

No.	Function
1	Slideshow viewer
2	Rotate photo
3	Zoom in
4	Zoom out
5	Moves to the next photo or back one

# Chapter 6 Troubleshooting and Maintenance

## 6.1 General troubleshooting

### 6.1.1 System stops responding; is “frozen” or “locked up.”

- To reset the Drive GPS 135, take a sharp object like a pen or paper click and depress the reset button on the bottom of the device. This is called a “soft reset.”

### 6.1.2 Users can also perform a “system reset.”

- To do a “system reset,” in the Main Menu, tap System, then tap System Info. This will allow you to do a factory reset (restore to default settings), reset the GPS and recalibrate the touchscreen interface.

### 6.1.3 Screen responds slowly

- Make sure you have enough battery power.

### 6.1.4 Inaccurate response to taps.

- Recalibrate the touch screen.

### 6.1.5 Connection Problems with PC.

- Make sure that the cable is securely plugged into the USB port on your computer and on the device. Connect the USB cable directly to your computer—do not run the cable through a USB hub.
- Reset your device before connecting the cable. Always disconnect your device before you restart your computer.

### 6.1.6 No GPS connection

- Make sure that the GPS antenna has a clear view of the sky. Note that the GPS reception can be affected by:
  - Bad weather
  - Dense overhead obstacles (e.g. trees and tall buildings)
  - Other wireless devices in the car

### 6.1.7 No sound coming from the device.

- Make sure mute is not selected for Volume in system settings. The built-in speaker turns off when the headphone jack is being used.

### 6.1.8 I can’t see my photos.

- Make sure you are using supported image formats, JPG and BMP.

### 6.1.9 Takes longer than normal time to get a GPS fix.

- If the previous GPS fix position was more than 500 km or 12 hours apart from your current position and time, it will take significantly longer than the standard TTFF time to get a GPS fix. This is due to the nature of the GPS algorithm and rotational velocity between the satellites and planet Earth, and deemed normal.
- Perform a GPS reset in the System Info to get a faster GPS fix.

### 6.1.10 Factory reset does not mean a GPS reset.

- The Factory Reset function only resets the OS settings to their default factory values; it will not reset the GPS settings.

## 6.2 Maintenance

- Keep your device away from excessive moisture and extreme temperatures.
- Avoid exposing your device to direct sunlight or strong ultraviolet light for extended periods of time.
- Do not drop your device or subject it to severe shock.
- Do not subject your device to sudden and severe temperature changes. This could cause moisture condensation inside the unit, which could damage your device. In the event of moisture condensation, allow the device to dry out completely before use.
- The screen surface can be easily scratched. Sharp objects may scratch the screen. You may use non-adhesive generic screen protectors designed specifically for use on portable devices with LCD panels to help protect the screen from minor scratches.
- Never clean your device when it is powered on.
- Never use organic solvents such as benzene or paint thinner to clean your device. Use of these solvents can cause deformation or discoloration.
- Use a soft, clean, lint-free cloth to clean the display screen. Moistened LCD screen wipes could also be used as required.
- Never attempt to disassemble, repair or make any modifications to your device. Disassembly, modification or any attempt at repair could cause damage to your device and even bodily injury or property damage and will void any warranty.

### 6.2.1 Storage precautions

- Do not store your device anywhere it may be exposed to water or in conditions of high humidity.
- When the device is not in use for an extended period of time, bring it indoors and store it in cool dry area.

### 6.2.2 Accessories and repair precautions

- Only authorized accessories should be used with the device. The use of incompatible accessories could result in bodily injury and/or damage to the device.
- The use of unauthorized accessories will also void your warranty.
- Never attempt to disassemble, repair or make any modification to your device.

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