dis 590 Portable Navigation Device

Reference Manual

User instructions for operating the Vector dis 590

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Vector dis590 Portable Navigation Device User's Guide
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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 Vector device. All correspondence concerning your unit should include the serial number, device ID, and purchase information.

Revision: 1.00
August 2006

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

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 4 GPS satellite signals is 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.

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Chapter 1 dis 590 PND Features and Specifications

1.1 Vector dis 590 PND features

No more fumbling with wieldy, outdated paper maps. No more sheepish ”I think I’m lost” expression. And most definitely, no more going in circles finding that particular spot. Get to your destination the fast and easy way with your new Vector d100 Portable Navigator.

1.2 Powerful system

1.3 Wide and accurate GPS coverage

- Destinator DS
- NAVTEQ digital map database
- Integrated patch antenna for optimum satellite pick up at every angle

1.4 Mobile design

- Compact and lightweight body makes it easy for users to carry it anywhere while driving or hiking
- Car mount kit for multi-vehicle usage (windshield or dashboard mounting)
- On-the-road recharging options via the car charger and USB cable

1.5 Ergonomic features

- 4.0 -inch
- Accessible control hot keys with backlight illumination
- Simple, easy-to-use user interface with large icons and command buttons
- Multi-language support for user interface
- Pre-loaded languages: International English, French, German, Italian, and Spanish
- Additional language options for navigation mode: Danish, Dutch, Norwegian, Portuguese, and Swedish
- Advanced power-saving options

1.6 Multimedia programs

- MP3 for your musical entertainment
- Photo for your favourite digital pictures

1.7 Contacts management programs

- Contacts for managing contact information on your device
- Vector d100 Contacts Exchange for managing contact information on your computer
- Microsoft ActiveSync 3.8 for synchronizing contact information
-

Overall dimension (w/o antenna)146.874mm*88.31mm*26.74mm
Weight (incl. battery)270g(TBD)
CertificatesCE/FCC

1.8 Hardware Mainunit

CPUSamsung S3C2440, 400 MHz, ARM compatible
NAND Flash256MB, Up to 2GB
RAM64MB
BluetoothBluetooth v2.0 compatible
Buttons5 buttons
Navigation padTouch screen
IndicatorsGreen/red for power, blue for Bluetooth
Earphone3.5mm, stereo
Memory ExtensionSD/MMC Memory Slot
Display4" Touchscreen, 480x272pixel, TFT, 16.7M colors
ConnectorsMiniUSB, external GPS-antenna, external TMC antenna, SD slot
USB InterfaceUSB v1.1

1.9 Software

FunctionalitiesVideo playback, image viewer, audio playback, navigation, Contacts, RDS-TMC(optional), FM radios(optional)
OSWindows CE 5.0
Bluetooth ProfilesHands-free

-Answer phone, Volume up/down, Dial up, Hang up phone, Reject phone,
Caller ID display, Echo cancellation, Dialing-out

1.10 Main Battery
TypeRechargeable Li-Ion
Voltage/Capacity3.7V, 1900mAh
Runtime (GPS on, Backlight on)appr. 2h(typ.)
Chargetime 4.5 hours

1.11 GPS
Typeinternal
ChipsetSiRF GSC3
Antenna typePatch antenna
Very first start time (cold start)typ. 42 sec
Warm start (after fix and power-off >= 4hrs)typ. 35 sec
Hot start (after fix and power-off < 4hrs)typ. 1 sec
Car Adapter
Input rating12-24V
Output rating5.0V, 2A
Power indicatorred LED, non blinking
Fuse2A
Certificatese-Mark

AC Adapter
AC-Rating110-240V, 50-60Hz
DC-Rating5.0V, 2A
Protection classII, LPS
CertificatesCE, UL, TUV
Extrasmain plugs exchangable for supporting UK, EU, US and Korea areas

USB ActiveSync Cable
Length120 cm

Chapter 2 Getting Started

This chapter describes the hardware interface of the Vector dis 590 and its peripherals. Instructions for setting up the device and some basic system operations are also discussed.

NOTE: Although the dis 590 rechargeable Li-ion 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. The On/Off button will glow yellow when charging.

2.1 Hardware overview

This section introduces the dis 590 PND external features and hardware components.

2.1.1 Packing list

The Vector dis 590 box contains all of the items listed below:

- dis 590 Portable Navigation Device
- Car mount kit
- Car mount cradle
- Car charger
- AC adaptor
- USB cable
- Destinator DS SD card
- User documentation
- dis 590 Portable Navigation Device Companion CD
- dis 590 Portable Navigation Device Quick Start Guide
- dis 590 Portable Navigation Device Warranty Booklet

2.1.2 Front Panels

Figure 1: Front Panel View

Table 1: Front panel controls

No.	Function	Description
1	Main Menu	To display Main menu home
2	Video player	Displays video player interface
3	Music player	Displays audio player interface
4	GPS	Goes to GPS function
5	Microphone	Microphone
6	LED	
7	Speaker	Speaker
8	Volume Up and Down	Touch and slide to increase/decrease volume

Figure 2: Top and Bottom view

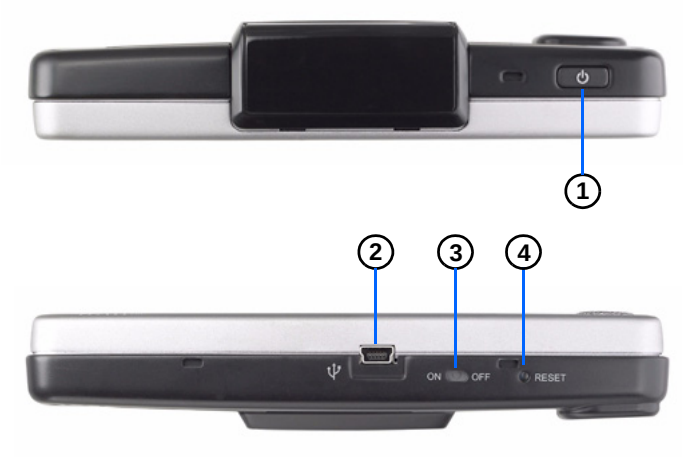


Figure 3: Left and Right side view

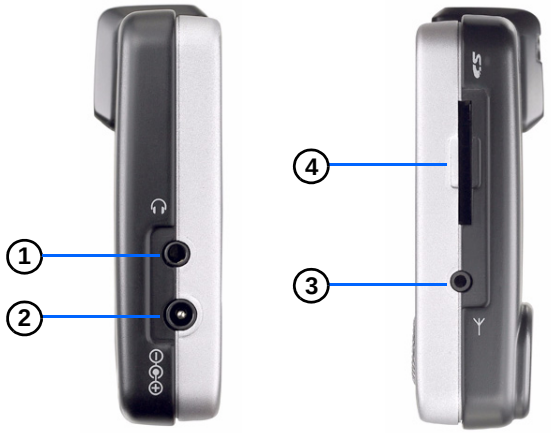


Table 2: Top and Bottom controls

No.	Function
1	Power button
2	USB input
3	On/Off
4	Reset

Table 3: Left and Right panel controls

No.	Function
1	Main Menu
2	Power input
3	FM antenna
4	SD/MMS slot

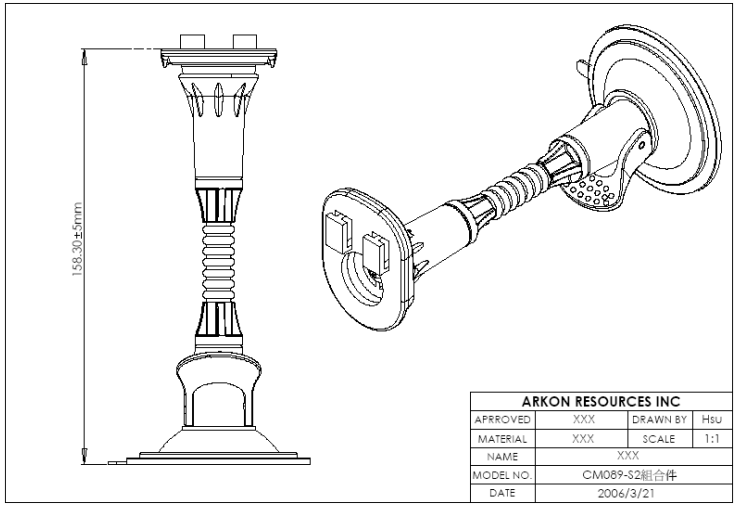


Table 4: Car mount

No.	Component	Description
1	Cradle plate	Connects the car mount to the cradle.
2	Horizontal angle adjustment knob	Slightly loosen the knob to adjust the viewing angle in a left-right direction.
3	Vertical angle adjustment knobs	Slightly loosen the knobs to adjust the viewing angle in an up-down direction.
4	Extendable rod	Extend the rod to adjust the device position in a front to rear direction.
5	Suction cup locking lever	Secures the vacuum seal of the car mount.
6	Suction cup	Fixes the car mount on the selected mounting area.
7	Suction cup release tab	Pull to release the vacuum seal of the suction cup.

Chapter 3 Using the dis 590

3.1 dis 590 Operating Basics

After fully charging the dis 590 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 by pressing the power button on the top right panel of the device.

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 black dot as it moves around the screen.

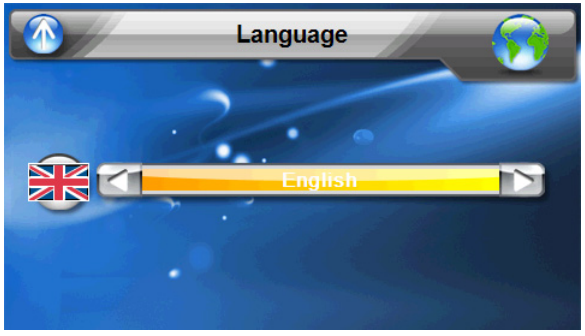
After calibrating the screen, the Main Menu panel displays. This is also referred to as the Home panel.

3.3 To configure system settings:

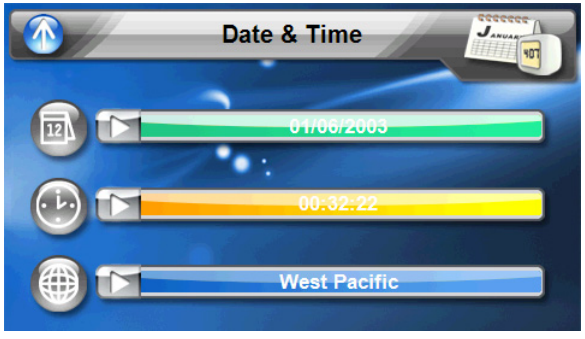
If you intend to start using your dis 590 at once, we recommend that you configure the language and date/time settings first. The rest of the user preferences can be set up later.

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

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.

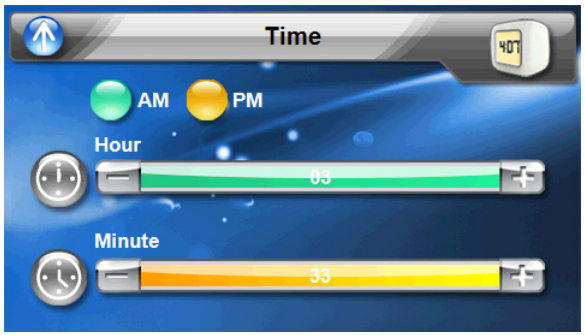


5. To set the system date and time, tap “Date & Time” in System Menu.



6. Tap the correct Year, Month and Day.
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.



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

10. Next, tap “Time Zone” in the “Date & Time” Menu.

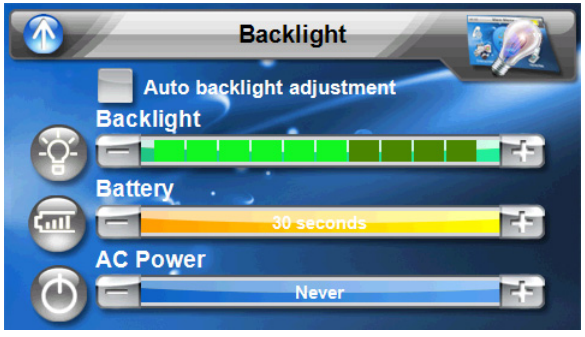
11. Tap the Up Arrow in the top left to set the Date and return to the “Date & Time” Menu.
12. Tap the Up Arrow in the top left of the “Date & Time” Menu to return to the System Munu.

3.4 Additional System settings

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

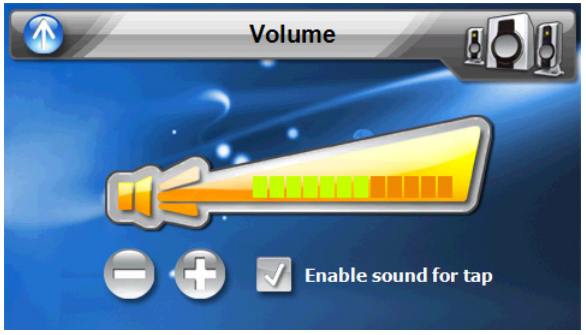
3.5 Backlight

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 or connected to a power source.
4. Tap the Up arrow to return to the System Menu.



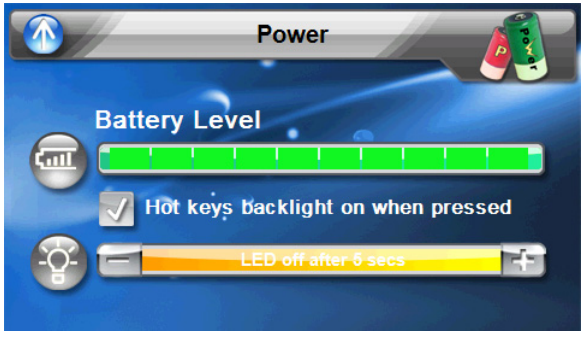
3.6 Volume

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 Power

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

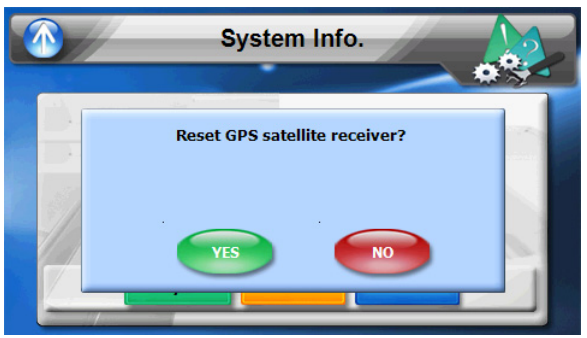


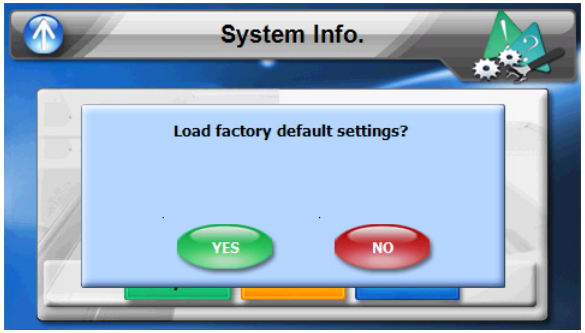
NOTE: Check Hot Keys backlight (LED) turn on when pressed. To conserve battery power, these settings should be set to lowest values.

3.8 System Information

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

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




System Info.
Load factory default settings?
YES
NO

Chapter 4 Snychronization with a PC

4.1 Creating and moving Contact information between the dis 590 and your PC

4.1.1 Using the SD/MMC slot

The dis 590 has an SD/MMC slot compatible with a range of SD and MMC 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.

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 dis 590 as a USB mass storage device, with the SD/MMC 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/MMC card and access them when in Multimedia mode.

It is advisable to organize files into subfolders. These subfolders will become playlists and help you to mange and better access the files on your device.

To enable access of multimedia files from your device, it should be located on the SD/MMC card, not on the device's memory.

4.2 Installing Microsoft ActiveSync

Use Microsoft ActiveSync to exchange information between your Acer d100 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 3.8 version from the Acer d100 Companion CD.

4.2.1 Minimum installation requirements:

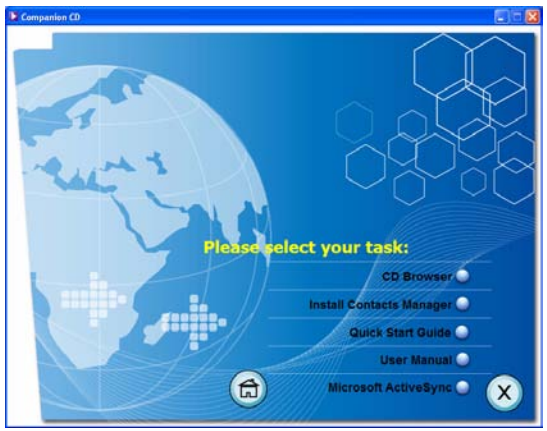
- Microsoft Windows XP, 2000, ME, and 98 SE
- Microsoft Outlook 2000 or later required for Contacts synchronization
- Microsoft Internet Explorer 5.0 or later
- Hard disk drive with 12 to 65 MB of available hard disk space
- Available USB port
- CD-ROM drive
- VGA graphics card or compatible video graphics 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 Vector dis 590 Companion CD into your computer's CD-ROM drive.

The CD's welcome page should appear.

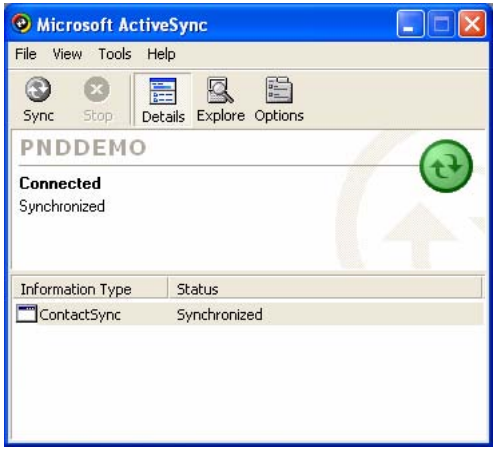
3. Click the installation language of your choice.
4. Click Install ActiveSync on the Please select your task screen.



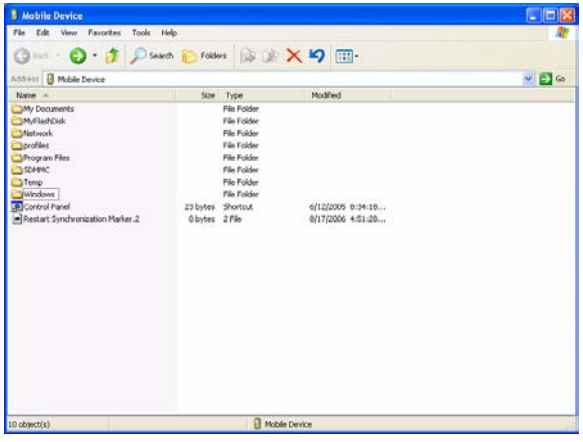
The installation wizard will automatically begin.

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/videos) 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.

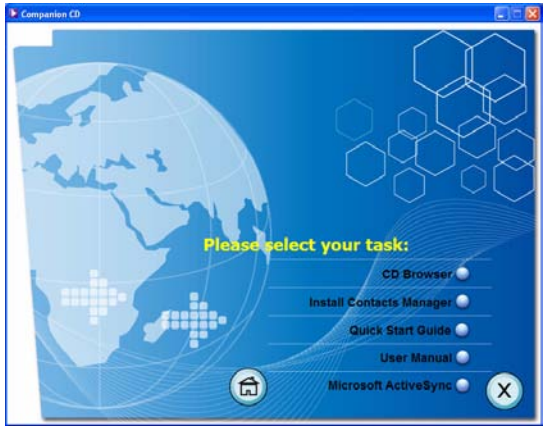
4.3 Installing Contacts Manager

Use Contacts Manager to manage the contact information located on your device and on your computer. This PC program shares the same contact database as the Contacts component of Microsoft Outlook. It only has an import/export function; you still have to create contact entries in Microsoft Outlook Contacts.

4.3.1 To install Contacts Manager:

1. Click Install Contacts Manager on the Please select your task screen.

The installation wizard will automatically begin.



2. Follow the on-screen instructions.
3. Click Finish after the installation process is completed.

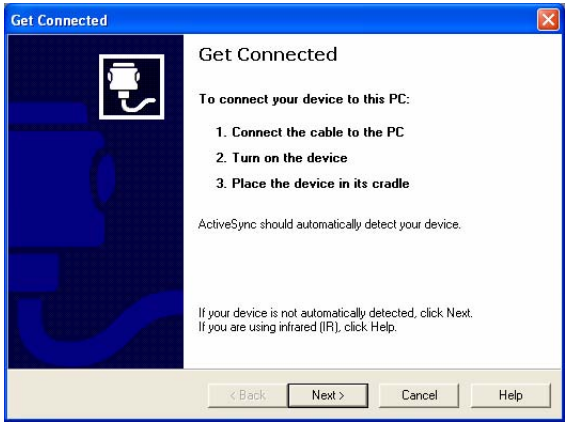
4.3.2 Creating a partnership

After completing the Activesynch installation and Contents manager installation, set up a partnership between your dis 590 and your computer with the help of the New Partnership setup wizard.

Once you've created a partnership, you will be able to synchronize contact information using ActiveSync.

To create a partnership:

1. If you want to upload files into an SD/MMC card for use with your Acer d100, insert the card to the device.



2. Connect the device to your computer using the bundled USB cable.
   - Plug the cable's smaller connector to the USB port on the left panel of the device.
   - Plug the USB client connector into an available USB port on your computer.

The New Partnership setup wizard will automatically start on your computer screen.

3. Follow the onscreen instructions.
4. When prompted to select the items to be synchronized, select only ContactSync.
5. Click Finish on the Setup Complete dialog box.

The initial synchronization process will automatically begin when you finish using the wizard. After the initial synchronization, information you've stored in Microsoft Outlook Contacts on your computer will now be available on your dis 590 without you having to manually input them on the device.

6. Disconnect your device from the computer and you're ready to go.

Now, once you have completed the first synchronization process, you can initiate synchronization from your device anytime, using the USB cable.

Chapter 5 Contacts Management

This chapter discusses the basic functions of Contacts on the dis 590 PND device. Details on how to perform contacts management tasks from your computer is also provided.

Contact files imported/exported to and from your device and computer are saved in .fs format.

5.1 Contacts

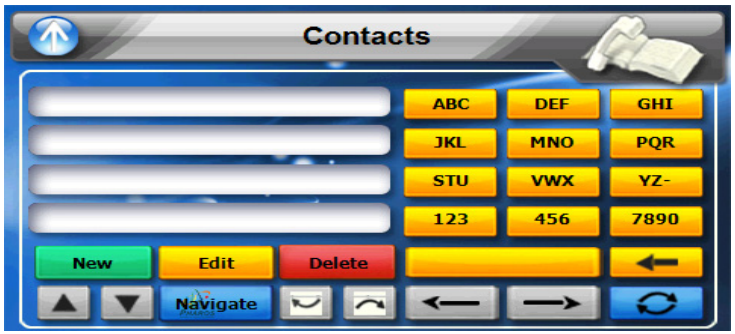
Contacts maintains a list of your friends' and colleagues' contact information. These include their email address, street address, multiple phone numbers, and other related information, such as birthday or anniversary dates.
You can enter multiple address entries for each contact. This program is integrated with GPS navigation enabling users to treat all address entries as possible destination points in navigation mode.

5.1.1 Using Contacts

5.1.2 To open Contacts:

The control pad displays the list of contacts and several command buttons for performing various Contacts tasks.

1. Tap on the Main Menu panel. The Contacts control pad displays.



5.1.3 Creating a new contact

1. Tap New.

2. Tap on the space to enter the related information for the new contact.

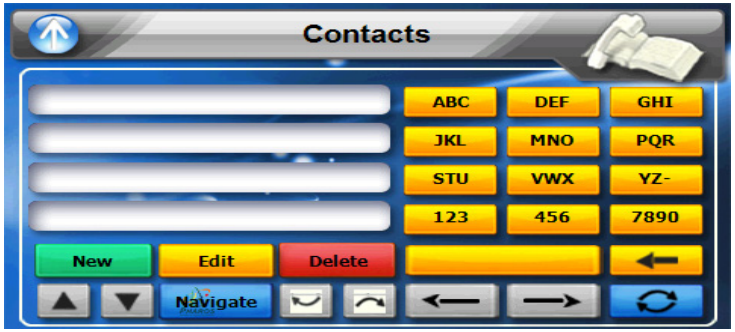
3. Enter other address.

4. Multiple phone numbers

5. Tap “SAVE” to save the new contact.

5.1.4 Editing contact information

1. In the Contacts control pad, tap the contact you wish to edit.
2. Tap Edit.
3. Enter the new information for the contact.
4. Tap “SAVE” to save the new contact.



5.1.5 Navigating to a contacts address

1. In the Contacts control pad, tap the contact whose address you want to navigate to.
2. Tap Navigate.

Address entries for the selected contact appears.

3. Tap the address you want to navigate to.
4. Tap Navigate.

The calculated route is shown on the map as a blue line from your current GPS position.

5.1.6 Exporting contacts from your dis 590 .

1. Insert an SD or MMC storage card into the device.

Exported contact file(s) will be saved to this storage card for later access from your computer.

2. Tap in the Contacts control pad.
3. Select whether to export all contacts, or just the currently selected one. Selected contact(s) will be exported to the SD/MMC card installed in your device.
4. Click OK on the completion dialog box.

Chapter 6 Entertainment

6.1 dis 590 Multimedia Player

The dis 590 is a fully capable multimedia player that can enhance your portable entertainment. In addition to its navigating function, the dis 590 is also a mobile entertainment tool that lets you enjoy video files, digital music, view photos and listen to FM radio. These functions make the dis 590 a true multimedia device.

To enable access of multimedia files from your device, the files should stored on the SD/MMC card, not in the device's memory. To transfer these files, do either of the following:

•Using the USB cable to connect the device, with the SD/MMC card inside, to your computer, then use File Explorer to copy videos, digital music and image files into the device's SD/MMC card folder. The dis 590 should be recognized as a USB mass storage device, with the SD/MMC card shown as a subfolder.
•Using a compatible card reader, directly copy videos, digital music and image files to the SD/MMC card.

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

6.2 Using the different media players

6.3 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/MMC card
- Separate volume control enabling you to adjust the playback sound level while retaining the volume level set for system sounds
- 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.

6.3.1 Using the MP3 player.

6.3.2 To enter into the different media players.

1. Tap the Entertainment icon in the Main Menu.

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

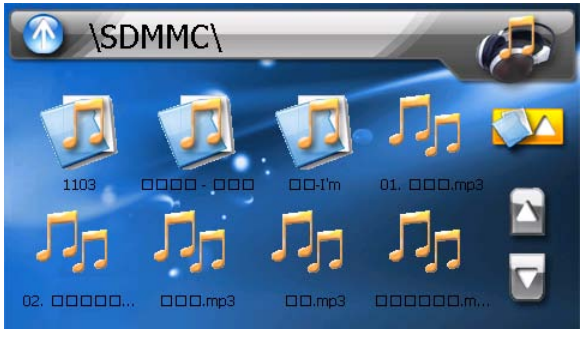
NOTE: You can also enter the MP3/music player by pressing the music hot key on the front panel. See section.....XXXXXX

3. The MP3 player window below controls playback.

Table 5: MP3 player functions

No.	Function	Description
1	Repeat	
2	Random play	
3	File collection/playlist	
4	Skip backwards/forwards	
5	Pause/Stop	

4. File collection menu (from #3 above).



6.4 Video Player

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

- Support for MPEG4 files
- Auto-scanning of supported files in the device's SD/MMC card
- Separate volume control enabling you to adjust the playback sound level while retaining the volume level set for system sounds
- 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.

6.4.1 Using the Video Player.

6.4.2 To enter into the different media players.

1. Tap the Entertainment icon in the Main Menu.

2. Tap "Video Player" in the Entertainment menu.

NOTE: You can also enter the Video player by pressing the video hot key on the front panel. See section.....XXXXXX

3. Use the Video Player panel below control playback.

Table 6: Video player functions

No.	Function	Description
1	Play	Turns the device on and off
2	Stop	
3	File playlist	
4	Skip backwards/forwards	
5	Pause/Stop	

4. Video Play List (from #3 above).

6.5 Photo Viewer

The dis 590 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/MMC 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."

Viewing files in Slide Show mode
You have the option to view images in a slide show much like viewing a PowerPoint presentation in your computer. Images are adjusted to fit the entire display area and are shown in a 3-second interval.

6.5.1 Using the Photo Album.

6.5.2 To enter into the different media players.

1. Tap the Entertainment icon in the Main Menu.

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

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

Table 7: Photo Album Menu

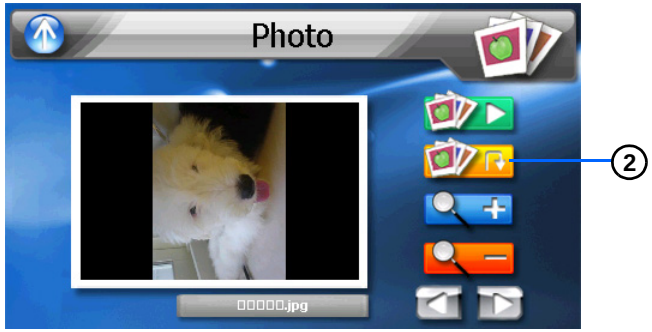
No.	Function	Description
1	Slideshow viewer	
2	Go up to Folder level	
3	Move selection up	
4	Move selection down	

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

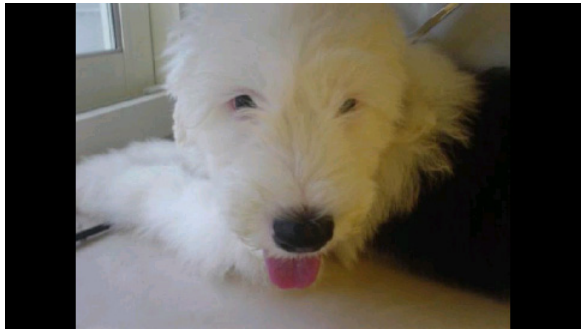
Table 8: Photo Album Viewer

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

5. Rotate an image below.



6. Photo full screen view.



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FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and

(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

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