ATTACHMENT E.

- USER'S MANUAL -

USER'S MANUAL

- **Navigation function**

- **Audio player function**

- **Game function**

- **Aux function**

Destination

Settings

Save

Exit

GPS [6]
47yd ... 0.0mi/h 13°24'51"E/52°32'45"N

★ Please, be sure to read the 'Safety Precautions' carefully before using this product.

★ Limited warranty is included in this User's Manual.

★ Specifications and design are subject to change without notice.

Please write your phurchasing date down here, which is needed for custom service and registration at our web site.

U.S.A.

U.S.FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT
INFORMATION TO THE USER

NOTE : 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 of a circuit different from that
  to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for
Compliance could void the user's authority to operate the equipment.
Connecting of peripherals requires the use of grounded shielded signal cables.

Navigation

Thank you for purchasing our product.

Navigation System User's Manual is designed to support convenient usage of the navigation system and safe driving. Please read the manual carefully before using the product for safe usage.

The content of this manual can vary according to the navigation system version, and function or performance of the navigation system and this manual are subject to change without prior notice for user's convenience.

Make sure to read this manual for safe driving.

Please comply with the following instructions to prevent the property loss of the driver and user.

⚠ Warning	Do not set or search for a destination while you're driving. Make sure to park at a safe place before operating this device.
⚠ Warning	It is very dangerous to operate the navigation system or look at the screen while you're driving. Be careful of surrounding traffic conditions or pedestrians if you have to operate the system while you're driving.
⚠ Warning	Voice guide and map route can be different from actual road conditions. Ensure to comply with the actual road signal system and traffic regulations for safe driving.

Table of Contents

1. Directions before using this product

Read this "User's Manual" without fail before using this product to use this product safely.

1-1. Usage directions

⚠ Warning	Refrain from operating the product in motion. Please park the car at a safe location when operating the product, because there is danger of a traffic accident.
⚠ Warning	Voice guide and map route can be different from the actual road condition. Ensure to comply with the actual road signal system and traffic regulation for safe driving.
⚠ Warning	If you modify the car to install this system, safe driving can be endangered.
⚠ Warning	Navigation system will not be liable for any damages arising out of any use of this product. The user will bear the sole responsibility.
⚠ Caution	Do not use this product for a long time after stopping the engine. The car battery can be discharged completely.
⚠ Caution	Do not use other cables than those provided. Turn off the power when connecting the external cable like A/V input, stereo output, and indoor TV antenna. If you connect the cable while the power is on, the product can be damaged.
⚠ Caution	Do not disassemble or apply shock to this product.
⚠ Caution	Touch the touch panel with a round edge object or fingertip softly. If you press the touch screen strongly with a sharp and hard object, it can damage the product.
⚠ Caution	Turn off the power and use the clean and dry cloth when cleaning the screen. Keep the screen away from water or chemical substance like detergent or solvent.

Basic Operation

1-2. Installation directions

⚠ Warning	Connect the wires properly by referring to "Installing product" section. Otherwise, malfunction or accident may occur.
⚠ Warning	Do not install the product in a position where driving can be interfered or driver's field of vision can be blocked.
⚠ Warning	Install the product in a position that does not interfere with driving or safety devices like an air bag.
⚠ Caution	Use only the connection cable for vehicle that was provided at the time of product purchase to ensure stable system operation.
⚠ Caution	This product must be used with 12V car power only. Do not use 24V power.
⚠ Caution	Do not install the product in a place with water, humidity, vapor, dust, oil, or smoke.
⚠ Caution	Some functions of this system are disabled for driver's safety when the car is in motion. Remove the test jack installed in the safety terminal and connect the hand brake cable to the car hand brake. If this cable is not connected, only "audio" will be supported in Aux mode.
⚠ Caution	Connect the Aux cable such as line out or A/V in after turning the power off. If the power is on while connecting the cable, the product can be damaged.
⚠ Caution	If you don't use the product for a long time after purchasing this product, car position sensing time can be prolonged, since the GPS antenna backup battery can be discharged. In this case, charge the battery for 2 ~3 hours while using the navigation system.
⚠ Caution	Do not put objects that interfere with GPS signal reception around the GPS receiver. Radio interference may occur.
⚠ Caution	Do not install electronic products that generates heavy electromagnetic waves like a radio transmitter around the GPS antenna.
⚠ Caution	GPS reception can be blocked if the car windshield is specially tinted.

1-3. Upgrade directions

▶ Do not connect 12V power when connecting ActiveSync.

▶ Depending on the USB memory product, the USB sensing time may vary or sensing may fail.

▶ Only the USB memory with FAT32 format is supported.
Format the USB memory as FAT32 before using it.

1-4. Troubleshooting

1) Touchscreen does not work

If you cannot set up the touchscreen in the Setup menu due to wrong setting, use the remote controller instead.

▶ Press the [Initial Screen] button on the remote controller to open the main menu screen.

▶ Press the [SUB-T] −> [ZOOM] −> [INFORMATION] −> [REPEAT] button sequentially in the DVD box of the remote controller to open the Touch Setting screen.

▶ Press the 5 cross marks using the test jack or touch adjustment rod, according to the instructions displayed on the screen.

▶ Press the screen once to close the Touch Setting screen.

Caution	Park the car in a safe place for touchscreen setting.

2) The LED turns on or flashes in red during self-diagnostic:

In addition, when the temperature inside the car is too high or low, the red LED flashes. In this case, follow the steps below.

▶ Turn the product power off and ventilate the car to get normal temperature.

▶ Turn the power on after a little while and observe the LED color.

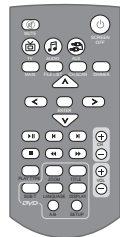▶ If the red LED still flashes in normal temperature, contact customer service.

Navigation

About Navigation System

2. Components

Navigation System unit

Remote controller[Option]

GPS antenna/ mount plate

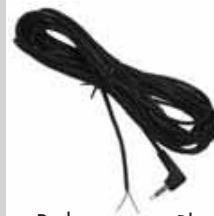Aux cable(AV In terminal) [Option]

Test jack

Cigar jack cable
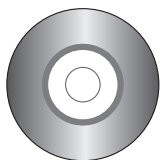
Stereo output cable [Option]

USB cable

Red : +   - : Black
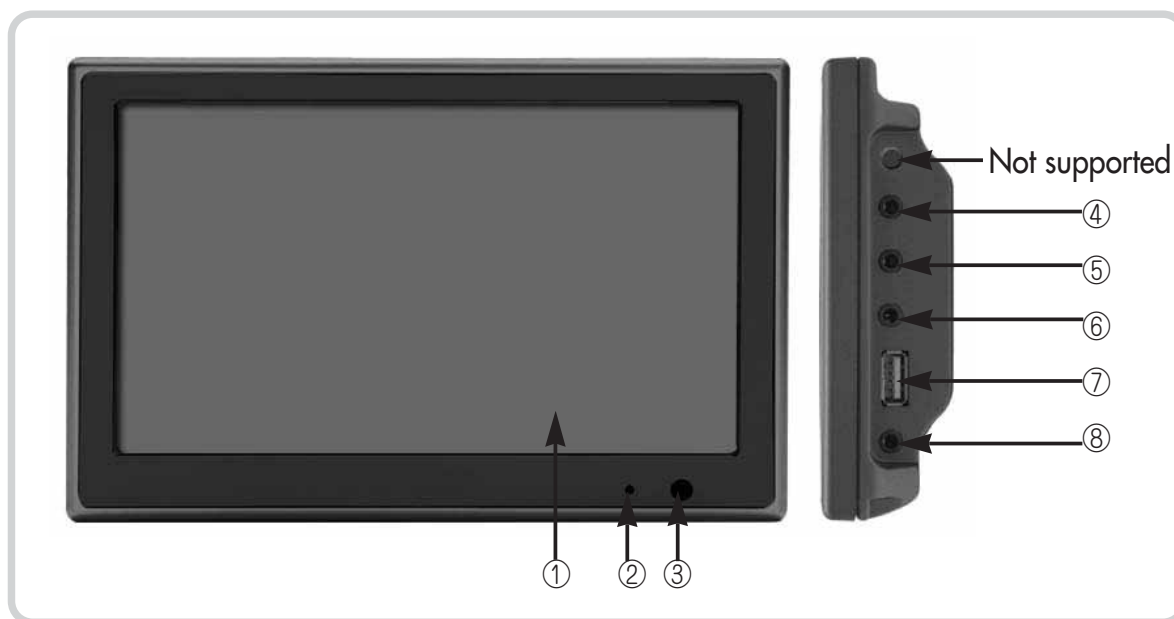Hand brake connection cable

Suction cap

DVD-ROM

User's manual

★ Specifications and design are subject to change without notice.

★ DVD-ROM includes MAP DB, activesync, usb driver, V-Up Pro, and manual file.

3. Description of external features

3-1. Front/Right side

① TOUCH SCREEN : Handles user touch input.

② LED : Displays the product status.

   (Blue : Normal operation, Red : Malfunction diagnostic)

③ REMOTE IR WINDOW : Receives the remote control signal.

④ AUDIO OUT : Output the audio signal to the external device.

⑤ AUDIO/VIDEO IN : Receives the A/V input from the external device like a DVD player or gaming device.

⑥ COMM : Connects to the car DVD player (optional). Controls the DVD player using the touch screen. (Compatible model : VXM family, VXD)

⑦ USB HOST PORT : Connects to the USB memory. Supports convenient upgrade and MP3 playback function.

⑧ SAFETY : Connects to the car hand brake after removing the test jack, which is installed in advance for safety.

Basic Operation

About Navigation System

3-2. Rear/Left side
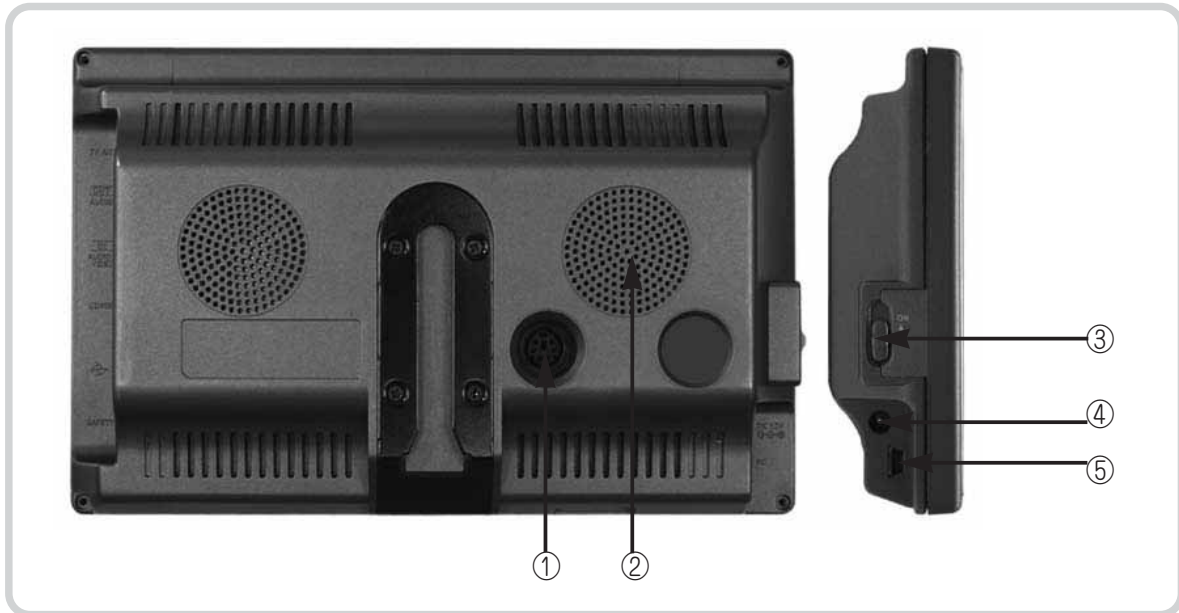
① GPS : Connects to the GPS antenna cable.

② SPEAKER : Outputs 1 watt audio.

③ POWER SWITCH : Turns the power on/off.

④ DC 12V : Connects to the provided cigar jack.

⑤ USB SLAVE PORT(Activesync Port) : Connects to the PC using the provided USB cable for map
upgrade or background download.

4. Installing the product

1) Fix the suction cup on the car windshield where the driver feels comfortable.

Caution   Remove any dust or foreign object from the windshield so that the suction cup can be attached firmly. Then, fix it with knob to prevent falling down due to shock.

Do not install the navigation set in a position that hampers driver's vision or driving. Be careful not to interfere with driving or safety devices like an air bag.

2) Connect the GPS cable to the product.
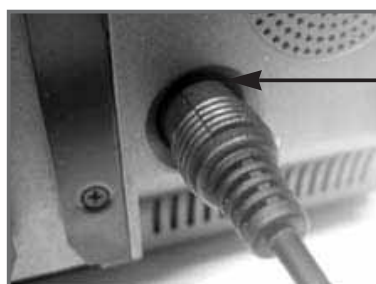
Connect here (GPS)

Caution   Plug in the GPS cable as described above.

Install the GPS mount plate in the position that can be exposed to the sky as much as possible for better GPS reception, and fix the GPS antenna on the GPS mount plate by setting the GPS logo to face upward. GPS sensitivity will increase if you use the GPS mount plate.

Basic Operation

About Navigation System

3) Adjust the position to fit into the driver's field of vision after fixing the product on the suction cup.

4) Connect the power cable to DC 12V terminal located at the left side of the product.

| **Caution** | Use the car cigar jack that is included in the product package. If you use other cigar jack, the product may not work properly. |

5) Remove the test jack from the Safety terminal and then, connect the cable to the hand brake.

Red : +   - : Black

| **Caution** | Make sure connect the cable to the car hand brake to prevent operation while in driving. If the hand brake connection cable is not connected, only "audio" external input will be supported. |

6) Flip the power switch ON that is located at the left side of the product.

1. Basic functions of Navigation System

1) Navigation function : Helps car navigation using GPS (Global Positioning System) engine and antenna, and electronic precision map.

2) Audio player function : Plays back MP3, WMA, and WAV music file.

3) Game function : Provides enjoyable games.

4) Aux function : Displays external A/V sources such as DVD players or gaming devices. When connected to a VXM or VXD series DVD player, touch screen controls can be wired to control the DVD player.

5) Setup setting function : Various functions can be configured such as slide show, background screen, touchscreen setting, volume control, dimmer control, USB upgrade, A/V input, file deletion.

Basic Operation

About Navigation System

2. Learning basic remote controller functions

You can access frequently used function using the remote controller, in addition to the touch screen for more convenient usage of Navigation System.
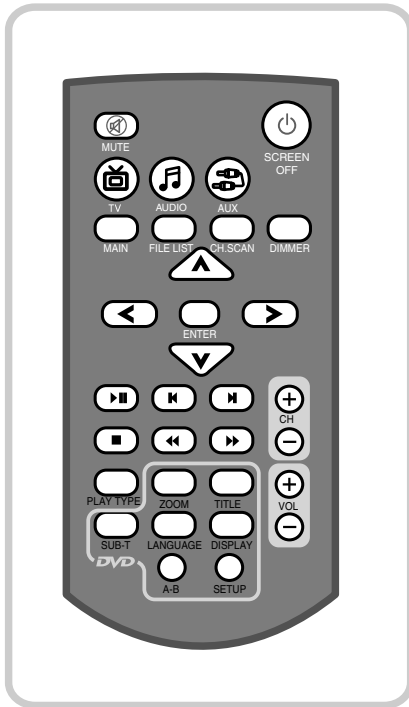
▶ (SCREEN OFF) : Turns on/off the LCD screen. Voice guide and audio playback will continue even when the LCD screen is turned off.

▶ (MUTE) : Mutes the sound temporarily.

▶ (TV) : Directly switchs to the TV function.[Option]

▶ (AUDIO) : Directly switches to the audio player function.

▶ (AUX) : Directly switches to the Aux function.

▶ (MAIN) : Directly switches to the initial screen.

▶ (FILE LIST) : Displays the DVD menu when connected to DVD player, or the play list in the audio player mode.

▶ (CH.SCAN) : Scans the TV channel. [Option]

▶ (DIMMER) : Controls screen brightness in 5 discrete levels.

▶ (▲) : Moves the cursor upward.

▶ (▼) : Moves the cursor downward.

▶ (◄) : Moves the cursor left.

▶ (►) : Moves the cursor right.

▶ (ENTER) : Selects the cursor that was moved by the direction key.

▶ (▶II) : Plays back/Pauses MP3 or DVD playback in the audio player/Aux mode.

★ DVD control using the Aux terminal is supported only when DVD player from this company is connected such as VXM/VXD.

▶ (⏮) : Moves MP3 or DVD playback section backward in the audio player/Aux mode.

▶ (⏭) : Moves MP3 or DVD playback section forward in the audio player/Aux mode.

▶ (⏹) : Pauses MP3 or DVD playback in the audio player/Aux mode.

▶ (⏪) : Rewinds MP3 or DVD playback in the audio player/Aux mode.

▶ (⏩) : Fast forwards MP3 or DVD playback in the audio player/Aux mode.

▶ ⊕ CH ⊖ : Sets channel up or down in TV mode. [Option]

▶ ⊕ VOL ⊖ : Sets volume up or down.

▶ PLAY TYPE : Sets Repeat All/Repeat Start when playing back DVD, or Repeat All/Repeat Selected/Random Selection when playing back MP3.

[Following functions are enabled only when DVD player from this company is connected.]

▶ ZOOM : Zooms in/out the DVD screen.

▶ TITLE : Displays the DVD title.

▶ SUB-T : Selects the caption in the DVD.

▶ LANGUAGE : Selects the sound type provided by the DVD.

▶ DISPLAY : Displays DVD player information.

▶ A-B : Repeats the section in the DVD.

▶ SETUP : Displays the configuration screen of VXM/VXD DVD player.

Caution	Navigation and game functions are not accessible using the remote controller.

Basic Operation

3. Main menu

Screen on/off

The main menu is composed of Navigation, Audio Player, Game, Aux, Setting, and Screen On/Off button.

4. Quick Start

This section will walk you through using your Personal Navigation Device for the first time, acquainting you with the basic operation of the navigation system.

- Switch on the unit and tap on NAVI or NAVIGATION in the first screen.
- If more than one language is available on your device, you are prompted to choose your language.

After the application loads, a screen with safety precautions will be shown. Please read them carefully. Afterwards, you can choose to hide these notes for future start-ups.

You will be presented an earth view of your country. Please enjoy while you fly over your country and touch down on your current location. (You can also choose to skip this intro by tapping on the screen.)

At the end of your journey, the start screen will be shown.

4-1. Start Screen
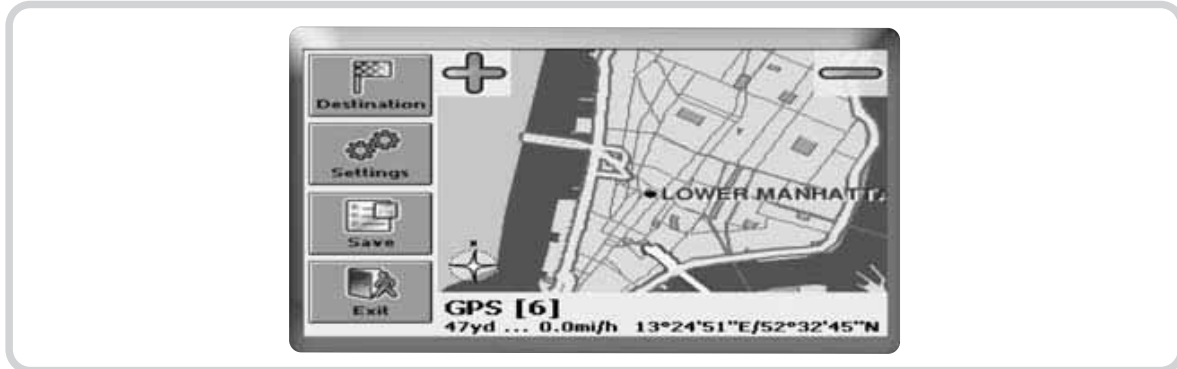
The start screen is split in two. On the left hand you will find the menu buttons, on the right you see a map with your current GPS position.

> It is not possible to browse the map in the start screen. This screen merely shows your current GPS position, provided that you have a GPS connection.

With the buttons on the start screen you access all functions of the application:

- Press Destination to choose your destination.
- Press Settings to adjust the application to suit your needs.
- Press Save to save your current position.
- Press Exit to quit the application.

On the bottom of the start screen, the following information will be shown:

- your GPS status
- the number of satellites the system is tracking
- the name of the current street
- your speed
- your elevation above mean sea level

Basic Operation

4-2. Choose a destination

• Select Destination to set your destination.

A menu will open where you can choose a destination:
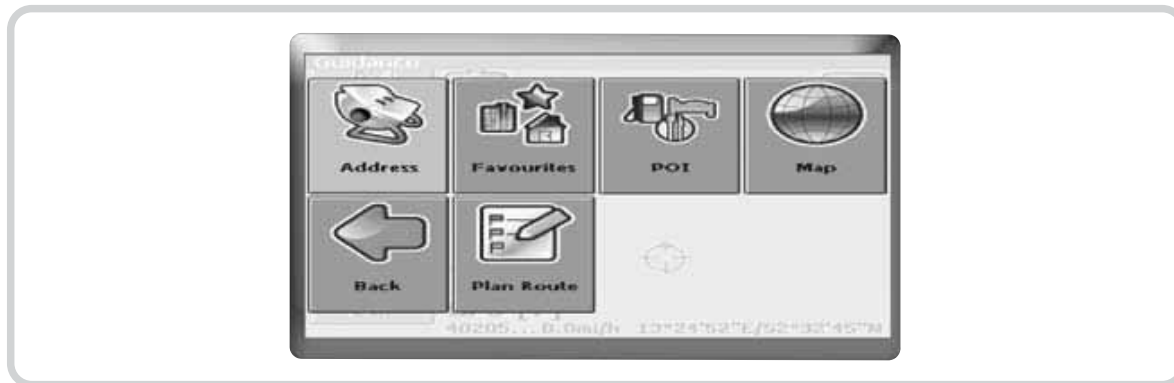
You have various ways to select your destination:

Address: If you know the city and street address for your destination, simply enter it and the application will guide you directly there. (See Address Search on page 19.)

Favorites: Through Favorites you can choose to be guided to your home address (My Home) or work address (My Work), select a previously saved location (Bookmarks) or a recently visited place (Recent). (See Favorites on page 22.)

POI: (Points of Interest): Through POI you can quickly find points of interest like gas stations and restaurants and choose them for navigation. Those POIs are chosen from a database of millions of POI, either nearby or at a remote location. You can also search branded travel/city Guides, which contain loads of valuable information about attractions, restaurants, hotels, etc. with detailed descriptions. (See POI/Guides on page 25.)

> Guides are an optional feature and may be purchased at customer service web site(please, see page 81).

Map: Another way of choosing your destination is selecting it on the Map. (See Map on page 29.)

Plan Route: By selecting Plan Route you switch to the advanced route planning options. There you may plan your route by choosing multiple stopovers. (See Plan your Route on page 31.)

> With the back and forward arrows you may always step one level back/forward throughout the whole application.

4-3. Navigation Screen

On the navigation map, the route will be shown in blue. The red arrow will indicate the direction of your next maneuver. Crosshairs identify your current position. When you come up to a turn or other maneuver, you will hear a voice command at the appropriate time.

For one-way streets, the transit direction is indicated with a red arrow.
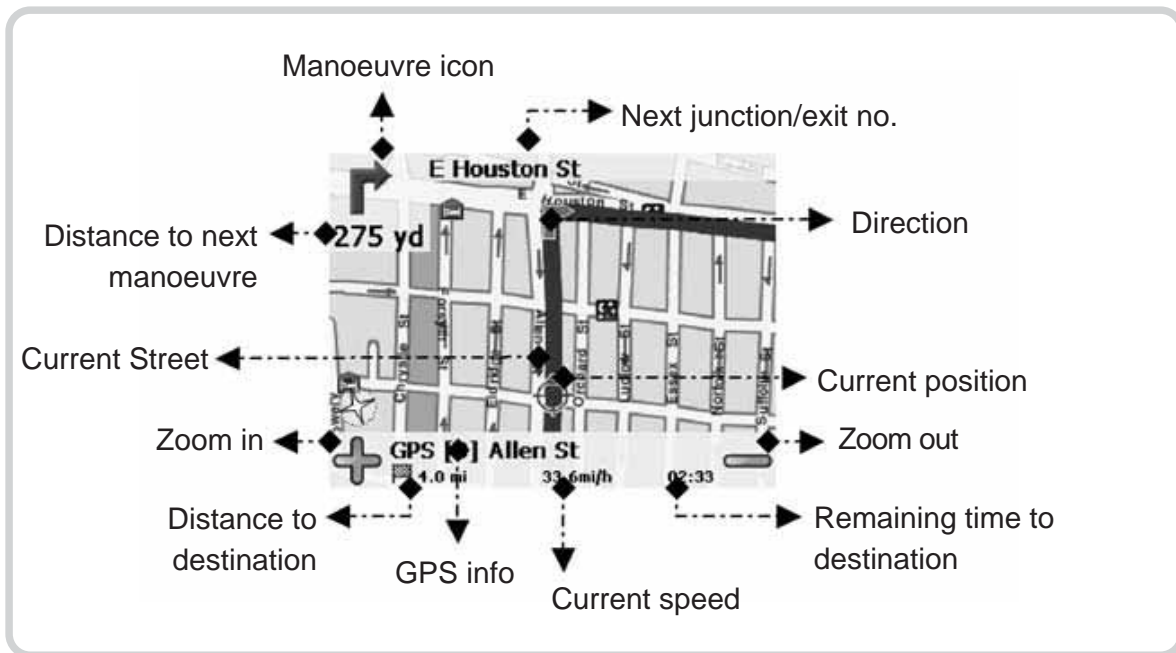
Using Navigation System

Arrow mode

You can choose to display the navigation screen in a simpler mode, the so called arrow mode. In this mode, only the most essential information will be shown — like arrows, street names, speed and time information.

- Tap on the screen during navigation to open the navigation options (see Change settings during navigation on page 36).
- Choose Settings.
- Choose the Arrows/Map symbol to switch between map and arrow modes.

Diagram labels:
- Next junction/exit no.
- Distance to next manoeuvre — 125 m — Baxter St
- Manoeuvre icon
- Distance to next street — 0 m
- Current Street — GPS [8] Walker St
- Distance to destination — 750 m
- GPS info
- Current speed — 31.1mi/h
- Remaining time to destination — 02:29
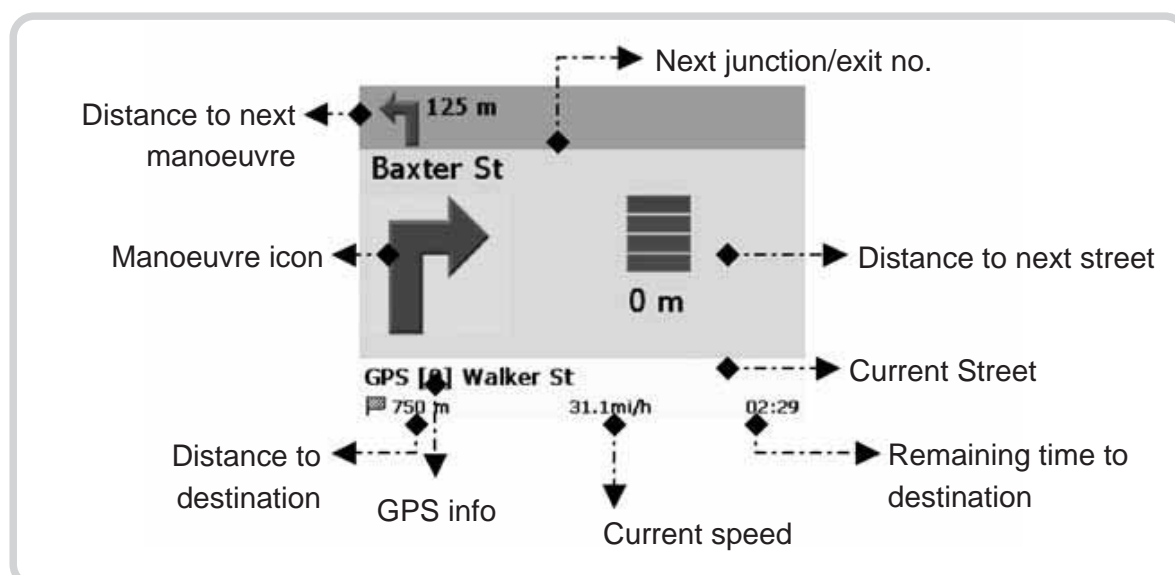
5. Detailed Description

This chapter describes the functions of your Personal Navigation Device in detail. On the following pages you will learn how to

- Choose your destination (see page 19)
- Plan your route (see page 31)
- Configure the application (see page 34)

5-1. Choose your Destination

This section describes the different ways of setting your destination. You may search for an address, choose a favorite (like home and work address, your bookmarks and recently visited locations), browse through POI lists and guides and choose an address on the map.

Address Search

Through the address search you can perform a search by entering information about the desired target (street and town/city). You may then select a hit from the hit list and start navigating.

- On the start screen, choose Destination.
- On the following screen, choose Address.

The Find Address window will show in the display:

Basic Operation

Using Navigation System

Enter the appropriate data to find your address.

Set the State

   • Press State to select your state.

   • Choose your state from the list.

The State field will be populated with the name of the chosen state.

Search for the city

   • Press City to select your city.

The keypad screen will show on the screen:

   • Enter the name of the town/city you are looking for (at least three characters).

> Switch between letter and number mode by pressing 123 or ABC. Switch between upper case and lower case by pressing ^.
> If at any point you want to backspace and delete characters, press the backspace button <- on screen. To add a space, press the space bar _.

   • Press the search symbol (magnifying glass).

A hit list will be displayed.

   • Choose the appropriate town/city from the list.

You will return to the Find Address screen. The City field will be populated with the name of the chosen town/city.

Search for the zip code

Instead of the city you may also enter the zip code.

• Press Zip code to enter a zip code.

• Enter the zip code of the town/city you are looking for.
• Press the search symbol (magnifying glass).

A hit list will be displayed.

• Choose the appropriate town/city from the list.

You will return to the Find Address screen. The City and Zip code fields will be populated with the chosen city/zip code.

Search for the street

Once you have found the city or zip code you are ready to look for the street name.

• Press Street to enter a street.

Basic Operation

Using Navigation System

- Enter the name of the street you are looking for (at least three characters).
- Press the search symbol (magnifying glass).

A hit list will be displayed.

- Choose the appropriate street from the list.

You will return to the Find Address screen. The name of the chosen street will be shown in the Street field.

> Additionally you may enter the number.

Navigate to the address found

Once you have narrowed down your search to a unique address, you can start navigation.

- Press the forward arrow.

Navigation will start immediately.

Favorites

Use your frequently used or favorite destinations for guidance. You can choose among your home, your work place, a set of personal bookmarks, and recently visited locations.

- On the start screen, choose Destination.
- On the following screen, choose Favorites.

The Favorites menu will show on the screen:

My Home

- Press My Home.

Your home address will be displayed on a map:
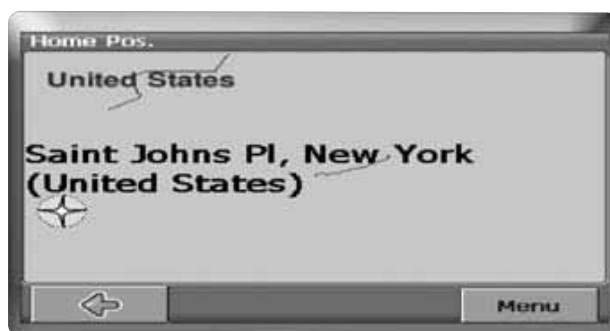
- Choose Menu.
- On the following screen, choose Navigate to be guided to your home address (press Change or Delete if you want to change/delete your home address).

Navigation will start immediately.

> If no home address has been set, you are prompted to do so. You can choose it by searching for an address, through your current GPS position or by choosing a recently visited location.
>
>

My Work

- By pressing My Work, your work address will be displayed on a map.
- Choose Menu.
- On the following screen, choose Navigate to be guided to your work address (press Change or Delete if you want to change/delete your work address).

Navigation will start immediately.

> If no work address has been set, you are prompted to do so. You can choose it by searching for an address, through your current GPS position or by choosing a recently visited location.

Basic Operation

Navigation

Bookmarks

The bookmarks list contains the destinations you have saved as favorites (from the guides, by choosing it on a map, etc.). This means that you do not need to perform repeated searches for those destinations.

- Press Bookmarks.

The bookmark list will show on the screen:

Use the up and down arrows to scroll up and down in the list.

- Select an item by clicking on it.
- On the following screen, choose Navigate to be guided to your bookmark (press Rename or Delete if you want to rename/delete your bookmark).

Navigation will start immediately.

> All user information like e.g. settings, bookmarks and recently visited locations will be stored on the memory card and not on the device.

Recent

By pressing Recent a list of recently visited or looked-up destinations will be opened.

- Press Recent.

The list of recent items will show on the screen:

Use the up and down arrows to scroll up and down in the list.

• Select an item by clicking on it.

Navigation will start immediately.

POI/Guides

With the POI finder you can quickly find points of interest like gas stations and restaurants that are chosen from a database of millions of POI, either nearby or at a remote location.

Within the POI menu you will see the guides, an optional and highly recommendable feature. Branded travel/city guides will help you to find out what is nearby and will give you valuable information about attractions, restaurants, hotels, etc. with detailed descriptions.

POI/Guides

• On the start screen, choose Destination.

• On the following screen, choose POI.

The POI menu will show on the screen:

Basic Operation

Using Navigation System

• Press At location to look for POIs at a remote location. You need to enter a city or zip code through the keypad, similar to the address search (see Address Search on page 19).

• Press Nearby to open a list of POIs near your current location.

By pressing Everywhere you can perform an overall search, encompassing the whole POI directory as well as all guides.

A menu showing the POI categories will be shown:

• Press on the desired POI category.

A menu with subcategories will be shown.

• Choose a subcategory.

A list of POIs will be shown.

• Select a POI by clicking on it.

• On the following screen, choose Navigate to be guided to the POI (press Info to show further details about the POI; press Map to show the POI on the map; or press Save to save the POI as a bookmark).

Navigation will start immediately.

Guides

Within the POI menu you will see the guides, an optional and highly recommendable feature. Branded travel/city guides will help you to find out what is nearby and will give you valuable information about attractions, restaurants, hotels, etc. with detailed descriptions. You may use the items contained in the guides for navigation or save them as bookmarks.

Guides are an optional feature and may be purchased at customer service web site(please, see page 81).

- On the start screen, choose Destination.
- On the following screen, choose POI.
- Choose Guide.

The guide list will be shown:

Select premium guide
- Northstar Brooklyn
- Northstar Manhattan
- Northstar Queens
- Northstar Staten Island
- Northstar New York
- Northstar Bronx

- Select the guide you wish to use by clicking on it.

The categories page of the chosen guide will be displayed:

Northstar Manhattan Categories
- Business Services
- Communication
- Dining
- For More Information
- Hotels
- Nightlife

You can now browse the guide by categories or search the guide.

Basic Operation

Navigation

Using Navigation System

Search the guide

- Press the search symbol (magnifying glass).
- In the search window, enter a search term (at least three characters), and start searching by pressing the search symbol (magnifying glass).

The hit list will be displayed:
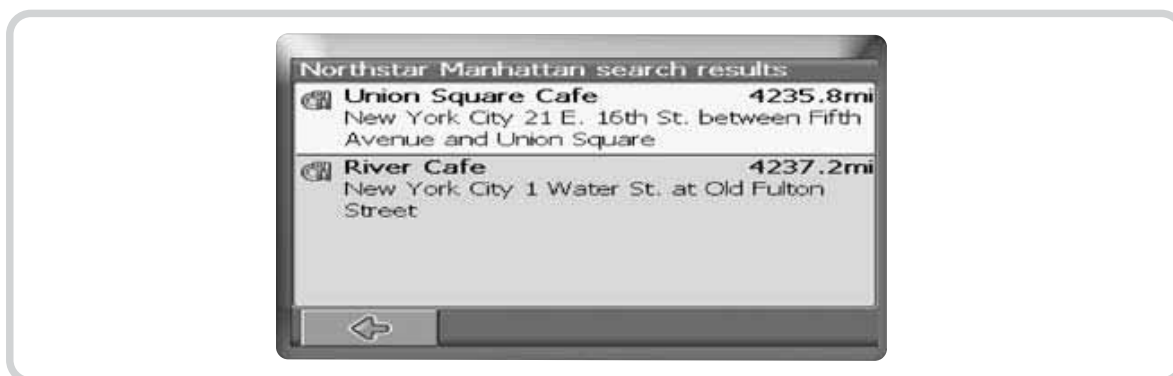
```
Northstar Manhattan search results
  Union Square Cafe              4235.8mi
  New York City 21 E. 16th St. between Fifth
  Avenue and Union Square
  River Cafe                     4237.2mi
  New York City 1 Water St. at Old Fulton
  Street

     <=
```

- Select an entry by tapping on it.

On the following menu you can .

- get detailed information about the selected location by pressing Detail.
- explore the location s surroundings by pressing Map.
- use the item for guidance by pressing Navi.
- save the item as a bookmark by pressing Save.

Browse the guide by categories

On the categories page you may select from the different categories of the Guide (e.g. restaurants, hotels, bars, museums etc.).

- Use the up and down arrows to scroll in the list.

Some guides also offer subcategories.

- Click on a category or subcategory to search for relevant items.

The search results will be shown in the hit list, sorted by distance.

- Select an entry by tapping on it.

On the following menu you can .

- get detailed information about the selected location by pressing Detail.
- explore the location s surroundings by pressing Map.
- use the item for guidance by pressing Navi.
- save the item as a bookmark by pressing Save.

Map

The map not only shows roads and squares, but also points of interest such as restaurants, cultural attractions, parking garages, etc. You can zoom out or zoom in to see all kinds of details.

- On the start screen, choose Destination.
- On the following screen, choose Map.
- Choose Guide.

The general map will now be shown in the display:

Street/POI Information

Selected POI/Street

Zoom In (down) and Out (up)

Toggle between 2D and 3D Mode

Basic Operation
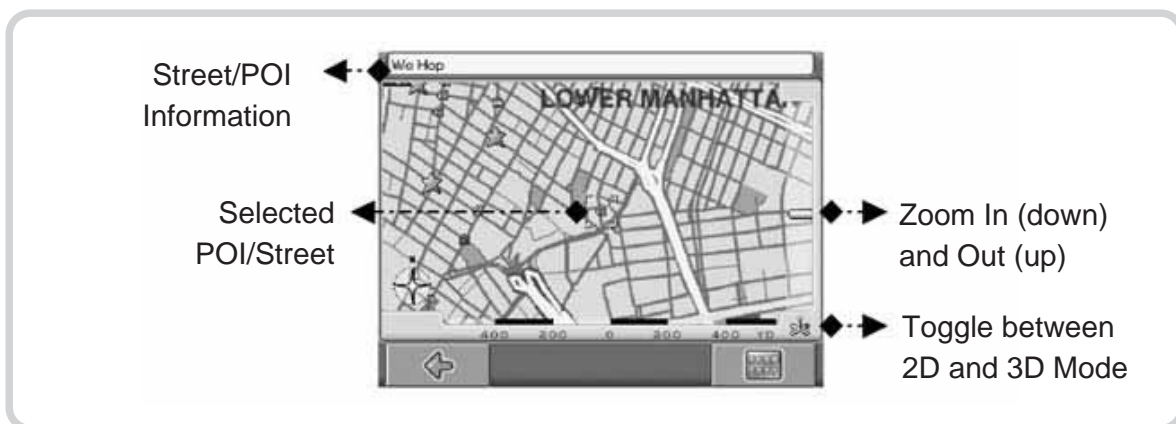
Using Navigation System

Functions of buttons

Discover your surroundings by dragging the map with your finger (or with the pen).

- Point at the symbol of a location to display its name.
- Use the scroll bar on the right to zoom in (down) or out (up).
- Use the symbol in the bottom right-hand corner of the map to toggle between 2D and 3D view.
- With the compass icon (in the bottom left hand corner) you may adjust the orientation.

By pressing the menu symbol (bottom right-hand corner of the screen), you can access to further options, like saving the actual location as a bookmark, moving to the actual GPS position, navigating to the selected location, searching for an address, and accessing to a bookmark or a nearby point of interest. You can also change your settings:

Map settings

- Press the menu symbol below the map.
- On the menu displayed, press Settings.

The map settings menu will be displayed:

- Toggle between night and day modes by pressing the corresponding symbol.
- Toggle between 2D and 3D mode by pressing the corresponding symbol.
- Choose Info Layers to choose which kinds of elements are to be shown on the map:

• Check the boxes of any category you want to have displayed on the map. Uncheck those that should be hidden.
• Press the confirmation symbol in the bottom right-hand corner to select/deselect all categories.
• Press the arrow symbol to return to the map.

> It is not possible to browse the map in the start screen. This screen merely shows your current GPS position, given you have a GPS connection.

5-2. Plan your Route

This section describes the route planning feature. This feature allows you to plan your route in advance, choosing multiple stopovers along your journey.
• On the start screen, choose Destination.
• On the following screen, choose Plan Route.
The Destination List will be displayed:

• Press the + symbol to add a stopover.

Basic Operation

Using Navigation System

You will switch to the Choose stopover screen. You may choose stopovers like your home or work addresses, a bookmark, a point of interest, a recent location or by searching for an address or pinpointing a destination on the map.

Once you have added stopovers (with the + symbol) and returned to the Destination List, you have several options:

- With the + symbol you can choose additional stopovers.
- To change the order of the stopovers, select a stopover and then use the up and down arrows to move it up/down in the list.
- With the trash symbol you can delete a selected stopover.

Once you have chosen your route, you have several options. You reach those options by pressing the menu symbol (bottom right-hand corner of the screen).

- Press Simulate to simulate the route to come.

- Press Start Navi to start guidance. The display will switch to the navigation map.

- With Routing the system will calculate your route. The Route Summary will be displayed. Tap on one of the items in the Route Summary to display the Waylist. Tap again to show the map view.
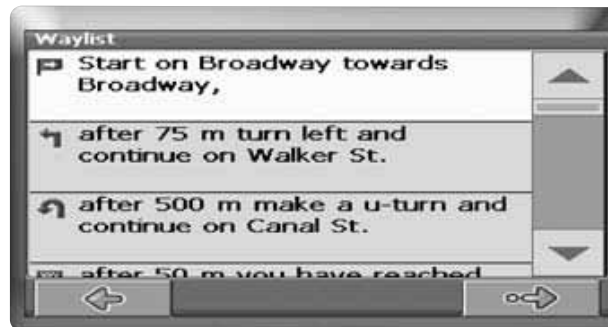
5-3. Settings

You can configure your Personal Navigation Device to suit your needs. When it comes to navigating, you can, for example, choose to avoid or allow toll roads or ferries or select your mode of transportation, like a fast or slow car, a scooter or even your own feet. You can also edit several display settings, like 2D or 3D mode, day or night mode, map complexity, etc.

- On the start screen, choose Settings.

The settings screen will be shown:

Guidance Settings

• Choose Guidance to change the guidance settings.

The window with the guidance settings will be displayed:

> If you have purchased additional features (see Optional Features on page 37), like TMC, SpeedCam Alert or Route Recording, you can switch them on or off through this menu.

• To switch between the modes just touch the icons. These will toggle so you can quickly see the activated settings.

You can choose among the following options: Mode of transportation (fast car, slow car, motorbike, pedestrian, etc.), fastest or shortest route, allow or avoid toll roads, highways, and ferries. You can also choose the distance unit (miles/kilometers).

Once you have chosen your settings, press the confirmation symbol to return to the main menu.

Settings (General Settings)

> • Choose Settings to change the general settings.

The windows with the general settings will be shown:

> • Press Info Layers to adjust the complexity of the map, i.e. to select which items are to be
>   shown on the map (see Map on page 29).

The other settings include switching between day and night as well as 2D and 3D mode and adjusting the Volume.

> • Press Back to return to the start screen.

Language

Choose Language to select the language of your navigation system.

Map

If you have map data for different regions/cities on your memory card, tap on the name of the current region (e. g. Northeast). All available maps on the memory card will be listed. You can choose the desired region by simply tapping on its name.

Change settings during navigation
• Touch the screen during guidance to open the settings screen:

Here you will find the following items:

Settings
Open a menu with general settings, as described in Settings (General Settings) on page 35. Additionally you can toggle between map and arrow mode for guidance.

> When you change to the arrow mode, the navigation screen will not show the map but only an arrow indicating the upcoming maneuver.

Guidance
Change the guidance options, as described in Guidance Settings on page 34.

Alt. route:
With this option, you can choose to block the calculated route for a given distance (e. g. 0.5 km) and force an alternative route. Simply tap on the icon which shows the desired distance. Your route will be recalculated, and the previous route will be discarded for the given distance.

Save
Save your actual position as a bookmark.

Traffic Info
Show a list of traffic jams. Traffic jams along your route will be displayed in red.

Nearby
You can redirect your route by choosing a point of interest (POI), like a gas station.

> All user information like e.g. settings, bookmarks and recently visited locations will be stored on the memory card and not on the device.

6. Optional Features

You can further enhance your Personal Navigation Device through a set of optional features. The following features are available as options for your navigation system:

- Guides
- Traffic Message Channel (TMC)
- Route Recording
- Speed Camera Alert

6-1. Guides

At www.navi-plugins.com you can find lots of valuable information services, including directory services, WiFi hotspot locators, and city guides. City guides contain detailed information about locations, such as descriptions, contact information, prices, opening times, etc.

To purchase the guides and to learn how to download them, please go to customer service web site(please, see page 81).

To learn how to use the guides, see POI/Guides on page 25.

6-2. Traffic Message Channel (TMC)

Depending on your device, you may upgrade your navigation system and receive dynamic traffic information (Traffic Message Channel, TMC).

- In the start screen choose Settings and then Guidance.

The window showing the guidance settings will be displayed:

• Press the TMC button (transmitter symbol) to switch between the TMC settings Automatic, Manual and Off.

With the Automatic option, your Personal Navigation Device will automatically guide you around all the traffic jams on your route. With the Manual option your navigation system will alert you about traffic jams and ask you if you would like to switch to an alternate route.

7. Frequently asked questions

I can t find an address.

Please make sure you have correctly spelled your entry. If you do not know how an address is spelled correctly, simply enter the parts of the address, you know for sure (e.g. New York , Times for Times Square in New York City). Then browse in the result list and look for the address. Also make sure that the city in which you are looking for an address is correct. Sometimes the official postal address differs from the address you are looking for. In that case, search for an address nearby that you know of and browse on the map.

If you find the address on the map but you can not find it while searching for it, please let us know via pnd@support.gate5.net.

There is a failure in the map / POIs are missing.

If you detect an error in the map data (e.g. a street is missing completely), we would like to inform our map data provider. Please let us know via pnd@support.gate5.net.

I have problems to get a GPS fix.

If you have problems getting a satellite fix with the GPS (you can see how many satellites are being received on the main menu at the bottom left) please make sure, that you are outside and the GPS antenna has a good visibility to the open sky. Some models also do support an additional external active antenna. Please also consult with the hardware manual of your device to get further information of how to obtain a GPS fix.

Where can I get technical support and updates ?

Please, contact your retail store or the customer sevice center in page 81.

Basic Operation

8. Audio player

You can play back music by selecting Audio player in the main menu. Basic functions include Play, Pause, Stop, Select Next, and Select Previous. Playback function includes Repeat, Repeat Selected, and Random.

The supported music file formats are MP3, WMA, and WAV.

You can save music files in the Navigation System internal memory or in the USB memory. The audio player manages the music file by albums.

You can save the music file in the internal memory using V-Up Pro program, and create an album at this time.

To play back music using the USB memory

(If the [icon] icon appears at the right upper side, the device detects the USB memory.)

1. If you save the music file in the root directory of the USB memory, it will be recognized as 'Default album 1'.

2. If you create a 'Music' folder in the USB memory and save the music file in it, it will be recognized as 'Default album 2'.

3. If you create a folder inside the 'Music' folder in the USB memory, this folder will be recognized as an album.

> **Caution** If you create a sub-folder under a user-defined folder in the main 'Music' folder, it will not be recognized. Be sure to create just one sub level of folders in the 'Music' folder.

8-1. Basic screen

	Repeats playback of the selected music file.
	Random playback.
	Repeats all music files.
	Play/Pause : Plays back the music file or pauses it.
	Stop : Stops playback.
Next	Moves to the next or previous music file.
Previous	
	Volume control : Increases sound volume.
	Volume control : Decreases sound volume.
	Mute : Suppresses sound volume.
	List : Displays the list of music files.
	Main menu : Returns to the main menu.
	Progress status bar : You can jump to the target point of the selected music file.

Basic Operation
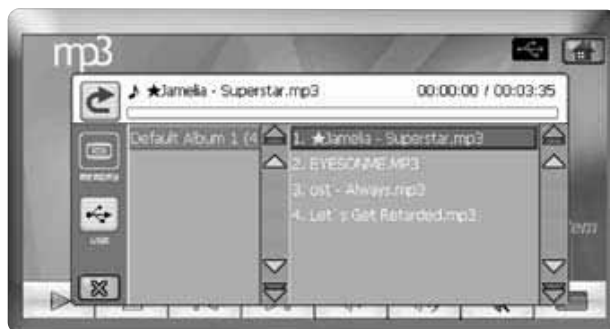
8-2. List screen

	Internal memory : Displays a list of music files saved in the internal memory.
	USB memory : Displays a list of music files saved in the external USB memory.
	Close : Closes the list screen.

1. Select the music file to play back from the internal memory or external USB memory.

2. Select the album that contains the desired music file.

3. Select the music file you want.

9. Game

Select the Game in the main menu.

How to play : If you place more than three of the same items in arow vertically or horizontally, these items will disappear.

To get higher score, remove as many items as possible at a single time.

Normal mode : The game will be over if no further mioves are possible.

If the bar on the right side is filled, the next level will start.

- Time trial mode : The game will be over if the time bar on the right side runs down. If the bar on the right side is filled, the next level will start.
- '?' : This button gives you a hint at the expense of losing some score. This button will be disabled if the score is not sufficient.
- New Game : Stops the current game and starts a new one.
- Quit : Exits the game.

Basic Operation

10. Aux

You can use the simple Aux function if you set A/V input as 'Others' in the settings section.

As shown by the above figure, only volume control and screen setting are supported in 'Others' mode. DVD player control is not supported.

If you press the [Screen Setting] button, the below screen will appear and you can change saturation, brightness, and contrast.

Optional function	The following functions are available when connected to the DVD player.

VXM and VXD are the model name.

If you have DVD player connected and select VXM or VXD as A/V input in Setup menu accordingly, you can access the DVD player function via the touchscreen controls. You can also use the remote controller to use the following functions.

① Play/Pause : Starts or pauses the DVD player.

② Stop : Stops the DVD player.

③ Prev/Next : Starts the DVD player and moves to previous or next screen.

④ Volume control : Controls sound volume of the DVD player.

⑤ Mute : Mutes the DVD player sound.

⑥ Setting : The menu will be changed to screen setting and DVD menu setting.

⑦ Hide menu : Hides the menu from the screen.

⑧ Returns to the main menu.

⑨ DVD player power on/off: Turns on/off the DVD player power.

Basic Operation

Using Navigation System

The following screen will appear if you press the [Setting] button.
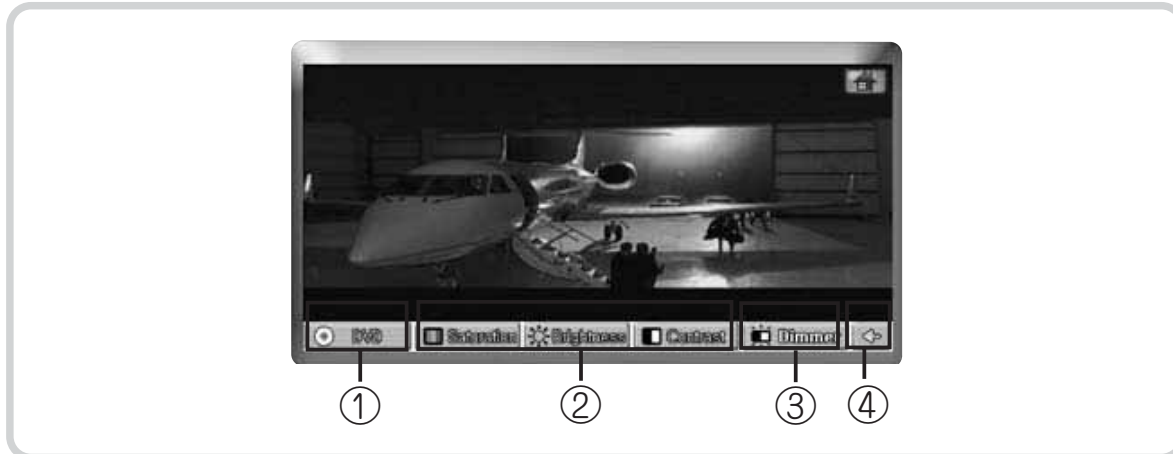
① DVD menu : Switches to the DVD title menu and displays the direction key menu,

 which makes cursor movement easier in the DVD title.

② Sets saturation, brightness, and contrast.

③ Dimmer : Controls brightness in 5 discrete levels.

④ Returns to the previous menu.

The below figure shows the screen when you press the DVD Setting button. You can move the DVD Title cursor using the direction key either via the remote control or the touchscreen controls.

The below figure shows the menu screen when you select saturation setting, brightness setting, or contrast setting button.
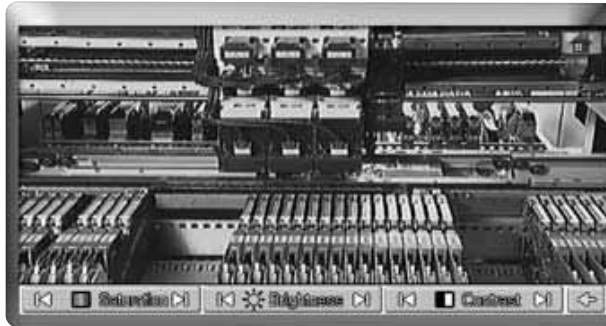
11. Setup

You can change many settings if you select Setup in the main menu.

11-1. Slide show

If no input is made for more than one minute in the main menu, specified images will be displayed sequentially in a slide show. You can select Off, 10 seconds, 30 seconds, 60 seconds, and 5 minutes for the time interval of image changing when the slide show is started.

11-2. Background image

You can select the background image you prefer.

1) Select the image to change and press the [SELECT] button.

2) If you press the [Previous] button, the background image will not be changed and the
   set up menu will reappear.

11-3. Touch setting

Touch setting : Select this menu to increase accuracy of the touch screen.

Caution
Touch setting requires
very delicate handling.
Make sure to park the car
and don't use the sharp object.

☑ OK   ⌂ CANCEL

Carefully press and briefly hold stylus on the center of the target.
Repeat as the target moves around the screen.

+
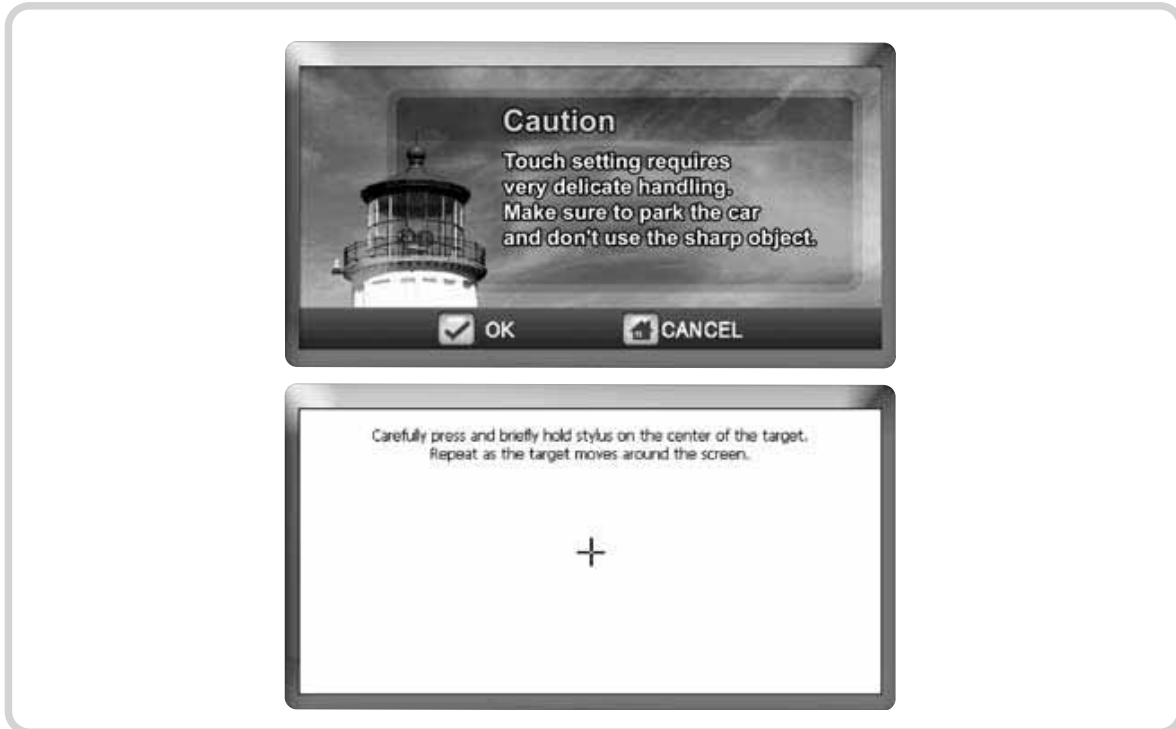
For touch screen setting, press and briefly hold the center of the cross symbol. Then, the cross symbol will appear at the left upper side, left bottom side, right bottom side, and right upper side one by one. To complete touchscreen setting, press the center of the cross symbol for 5 times in total.

> **Caution**   If you press the point that is far away from the cross symbol during touchscreen setting, the cross symbol will appear indefinitely. Therefore, always stop the car before setting up the touchscreen setting. Do not use a tool with too sharp tip, since it can damage the touch panel. Instead, use a round edge object like the test jack for setting.

Basic Operation

11-4. Volume

You can select from 16 levels of sound volume.

11-5. Dimmer

You can select from 5 levels of screen brightness.

11-6. Upgrade or download using USB memory

You could download navigation map database, OS, background images and slide show images to your system by using the USB memory stick. Especially, to change the the navigation map in your system, you have to down another map from DVD-ROM disc provided to USB memory by using V-Up Pro.
And so, If you want to upgrade the latest version of navigation map database and OS for your system, these could be downloaded from the customer service web site in page 81 and you have to register at the upgrade web site before upgrading.

▶ Navigation upgrade or download
1) Download and run V-Up Pro from DVD-ROM disc and select USB as a storage media.
2) Save the upgrade or download file in the USB memory.
3) Connect the USB memory to the device. When the USB connection icon appears, select Navigation Upgrade.

4) Press the [OK] button.
5) When upgrade is complete, restart the unit.

▶ OS upgrade

1) Download and run V-Up Pro from DVD-ROM disc and select USB as a storage media.

2) Save the upgrade file in the USB memory.

3) Connect the USB memory to the device. When the USB connection icon appears,
   select OS Upgrade.

4) Press the [OK] button.

5) When upgrade is complete, restart the unit.

▶ Background download

(Only 480 X 234 size BMP file is supported. You can create a background image
 conveniently using the V-Up Pro program that is provided in the DVD-ROM disc.)

1) Create a folder named \upgrade\background\ in the USB memory.

2) Save necessary upgrade files in this folder.

3) Connect the USB memory to the device. When the USB connection icon appears,
   select Background Image Upgrade.

Basic Operation

Navigation

Using Navigation System

4) Press the [OK] button.

▶ SLIDE download

(Only 480 X 234 size BMP or JPG file is supported. You can create the slide show file conveniently using the V-Up Pro program that is provided in the DVD-ROM disc.)

1) Create a folder named '\UPGRADE\SLIDESHOW\' in the USB memory.

2) Save necessary upgrade files in this folder.

3) Connect the USB memory to the device. When the USB connection icon appears, select Slide Show Upgrade.

4) Press the [OK] button.

▶ Upgrade will fail if you try to upgrade when the internal memory is not sufficient, or the external USB memory is not available, or no upgrade files are saved in the USB memory.

If the internal memory capacity is insufficient, delete some files to secure enough memory space. When upgrading, see if upgrade files are saved in the USB memory, and the USB memory is connected properly.

Caution	Make sure to fully understand the instructions provided with upgrade files, since failed upgrade may result in product malfunction.

11-7. A/V Input

In Aux mode. You can control the DVD player using this device, when the DVD player is a VXM or VXD series. To connect other manufacturer's product, set to 'Others'. Default value is 'Others'.

11-8. Delete file

Using this menu, you can delete the file inside the internal memory.

1) Deleting the background image file

▶ Press the [Delete] button to delete the selected file only, or press the [Delete All] button to delete all background image files.

Basic Operation

2) Deleting the slide show file

▶ Press the [Delete] button to delete the selected file only, or press the [Delete All] button to delete all slide show files.

3) Deleting the music file

▶ Press the [Delete] button to delete the selected file only, or press the [Delete All] button to delete all music files in the album.

11-9. Confirm settings

You can save all settings by pressing this button.

11-10. Cancel settings

You can cancel all settings you made by pressing this button.

11-11. Restore default

The factory default setting will be restored, if you press this button.

Basic Operation

1. Installing ActiveSync and V-Up Pro Program

1-1. Install ActiveSync Program

A. Execute ActiveSync installation file (MSASYNC_3_8.EXE) in DVD-ROM disc provided.

B. Carry out ActiveSync program installation.

C. Connect the navigation set to PC using USB cable.

D. If PC find unknown device, update device using device driver file (wceusbsh.inf) in DVD-ROM disc.

★ If device update correctly, you could see the device information at device manager.

(Device name : DVS Korea USB EZ-Link Cable)

1-2. Install V-Up Pro Program

A. Execute V-Up Pro installation file in DVD-ROM disc and carry out the following installation procedure.

B. Specify the installation folder. See Figure 1-1.

Figure 1-1. Specifying V-Up Pro installation folder

C. Program installation will be started. See Figure 1-2.
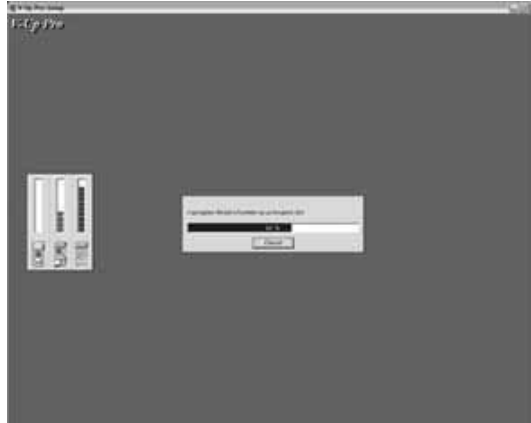
Figure 1-2. V-Up Pro Installation Progress

D. If successfully installed, the "Setup Complete" message will be displayed. See Figure 1-3.

Figure 1-3. Completion of V-Up Pro installation

E. The following program group and the shortcut icon will be created in Programs menu as shown in Figure 1-4.

Figure 1-4. V-Up Pro shortcut icon

★ If you need technical support and download the latest version, please contact the your retail store or visit customer service web site in page 81.

2. Running V-Up Pro Program

A. Select Start → Programs → Plenio → V-Up Pro → V-Up Pro shortcut icon.

B. V-Up Pro will be started. See Figure 2-1.
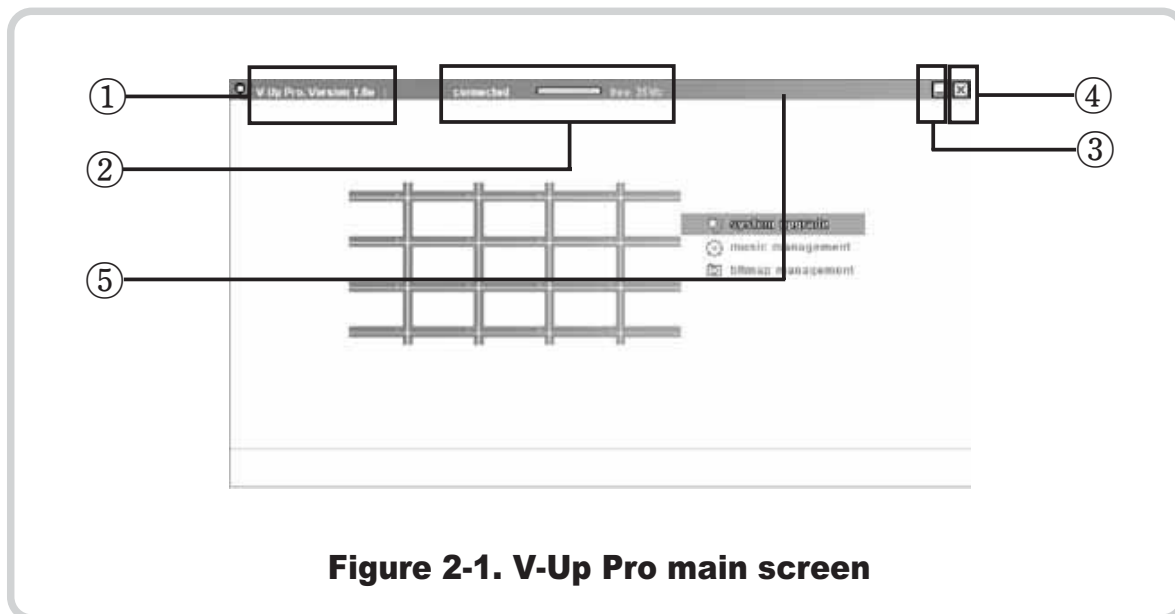
Figure 2-1. V-Up Pro main screen

   ① V-Up Pro program version

   ② Connection status and remaining memory capacity

   ③ Minimize window button

   ④ Close window button

   ⑤ Title Bar: You can move the V-Up Pro program window.

3. Closing V-Up Pro Program

A. When you click the [Close] button, the program closing confirmation window will appear as shown in Figure 3-1.

B. Click [Yes] to exit from V-Up Pro program.

Figure 3-1. V-Up Pro closing confirmation window

Navigation

V-Up Pro

4. System Upgrade

A. Execution

A-1) Click the "System Upgrade" icon in the V-Up Pro main screen.

A-2) Then, the screen shown in Figure 4-1 will appear.
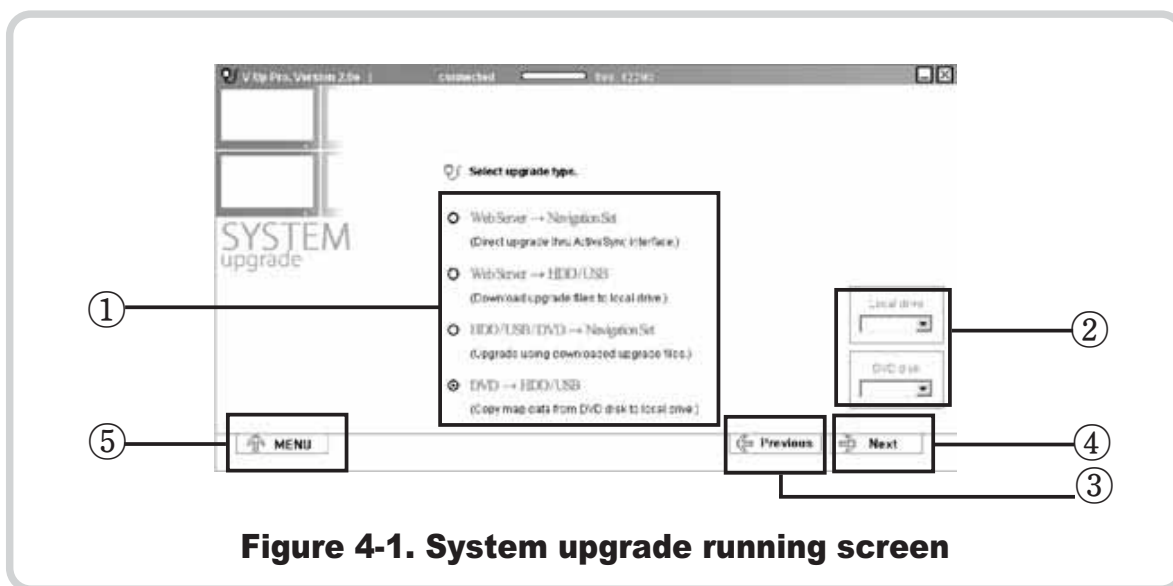

Figure 4-1. System upgrade running screen

① Select the upgrade type (radio button)

② Local drive and DVD-ROM disc selection combo box

③ [Move Previous] button

④ [Move Next] button

⑤ [Move to V-Up Pro Main Menu] button

A-3) Select the upgrade type using the radio button shown in Figure 4-1.

Web Server → Navigation Set

Transfers upgrade files directly to the navigation set through ActiveSync connection.

Web Server → HDD/USB

Saves upgrade files in the local drive specified by the user.

(See Figure 4-2 for specifying the local drive.)

HDD/USB/DVD → Navigation Set

Reads upgrade files from the user-specified local drive and transfers them to the

navigation set.

(See Figure 4-2 for specifying the local drive.)

DVD → HDD/USB

Reads upgrade files from the user-specified DVD-ROM disc and transfers them to local drive.

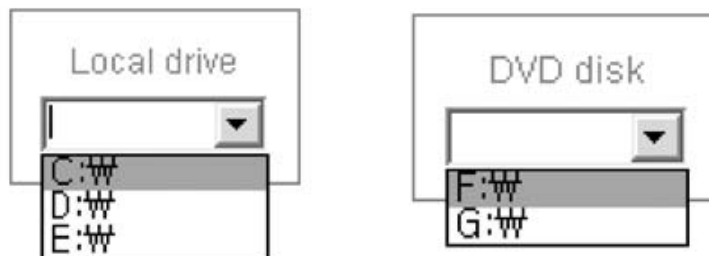(See Figure 4-2 for specifying the local drive and DVD-ROM disc.)

Figure 4-2. Specifying local drive and DVD-ROM disc

A-4) Move to the next step by clicking the [Next] button (Figure 4-1 ④) after selecting the

upgrade type.

B. Selecting upgrade items

★ Upgrade selection window will appear only when "Upgrade directly" or "Download upgrade files" is selected.

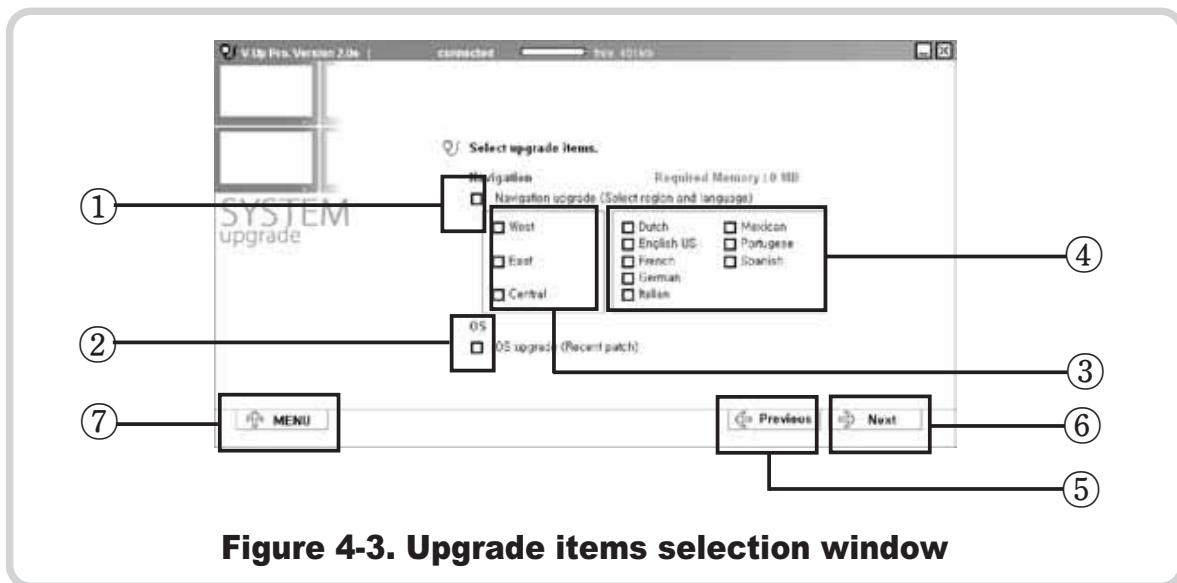B-1) Select the item to upgrade using the "Select upgrade items" check box (Figure 4-3 ①). (Navigation, OS)

Figure 4-3. Upgrade items selection window

① Navigation selection check box

② OS selection check box

③ Map coverage selection check box

④ Voice Language selection check box

⑤ [Move Previous] button

⑥ [Move Next] button

⑦ [Move to V-Up Pro Main Menu] button

B-2) To upgrade the navigation, select the navigation selection check box (Figure 4-3 ①) and select the target area using the map coverage and voice language check box (Figure 4-3 ③). See Figure 4-4.
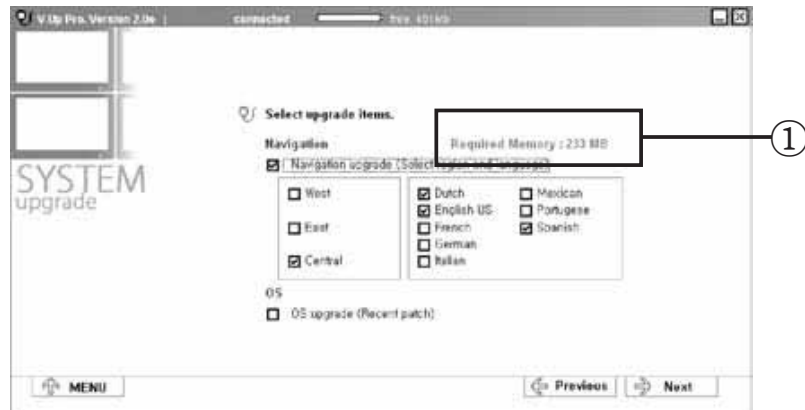

Figure 4-4. Navigation data selection screen

① Calculate and display checked components' memory.

B-3) To upgrade to the latest OS, select the OS selection check box (Figure 4-5) and click the [Next] button (Figure 4-3 ⑥).

Figure 4-5. OS upgrade selection screen

★ The alarm message window appears when navigation upgrade is selected (Figure 4-6). Select the [Yes] button to continue upgrade.

Figure 4-6. Navigation upgrade alarm window

C. Upgrade

C-1) If the upgrade type and item are properly selected, the upgrade progress screen will appear as shown in Figure 4-7.

★ The selected upgrade item list will appear at the Figure 4-7 ② position.

Figure 4-7. Upgrade progress screen

① Upgrade cancellation button

② Upgrade list display section

C-2) Click the [Cancel] button (Figure 4-7 ①) to stop upgrading and return to the previous step.

D. Upgrade completion

D-1) When upgrade is complete successfully, the Complete message window shown in Figure
     4-8 will appear.

Figure 4-8. Upgrade complete message window

5. Music Management

A. Execution

A-1) Click the "Music Management" icon in the V-Up Pro main screen.

A-2) The screen shown in Figure 5-1 will appear.
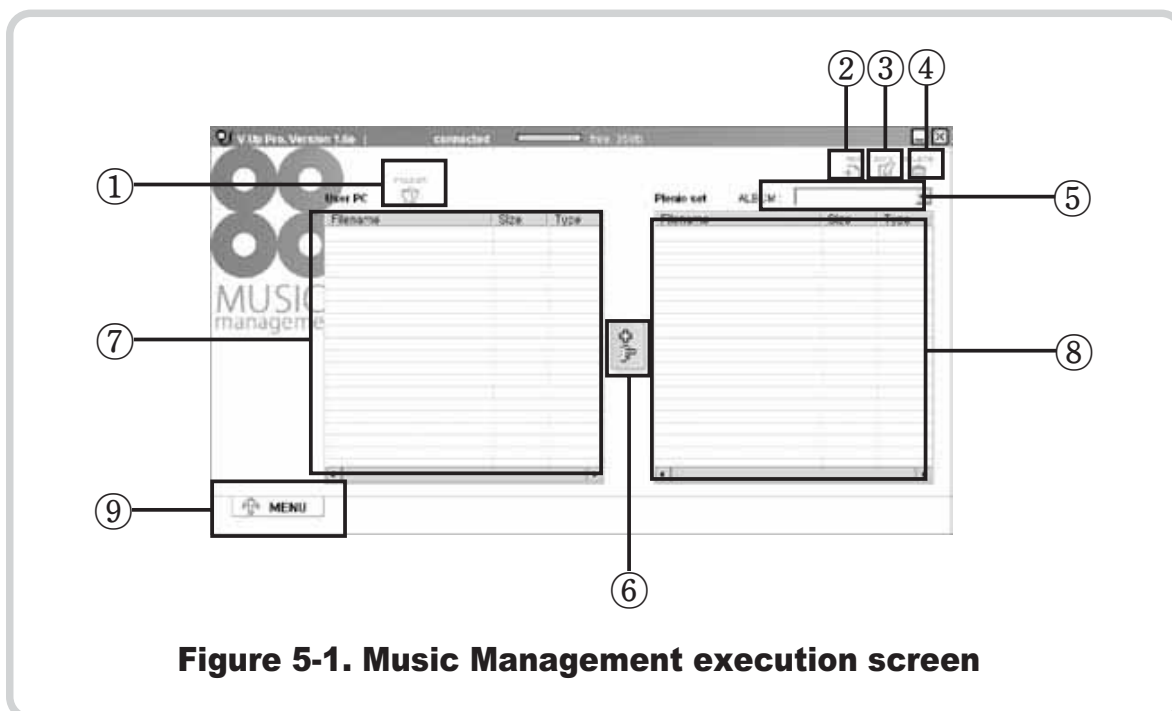
Figure 5-1. Music Management execution screen

① Opens the music file from the user PC.

② Creates a music album in the navigation set.

③ Edits a music album in the navigation set.

④ Deletes a music album, and music file selection in the navigation set.

⑤ Selects the music album in the navigation set.

⑥ Copies the music file.

⑦ Displays the music file in the user PC.

⑧ Displays the music file in the navigation set.

   (Displays the music file in the selected album.)

⑨ Moves back to the V-Up Pro main menu.

B. Opening music file from user PC

B-1) Click the "Open Music File" button (Figure 5-1 ①) and select the music file folder in the user PC.

B-2) If any music file is available in the selected folder, it will be displayed in the music file list window. See Figure 5-2.

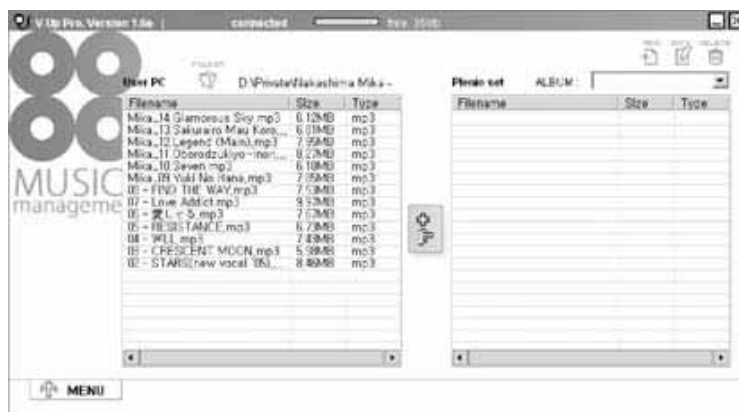★ Supported music file type: MP3, WMA,WAV.

Figure 5-2. Displaying the music file in the user PC

C. Creating and selecting music album in the navigation set

C-1) Click the "Create music album" button (Figure 5-1 ②) and input the name of the album to create in the "Name" input window. (See Figure 5-3.)

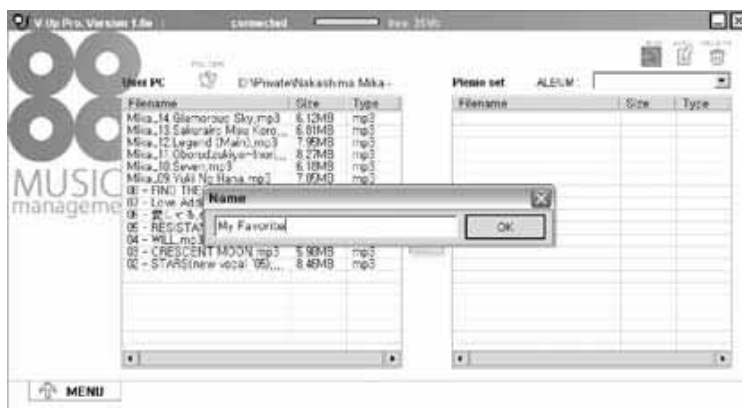**Figurer 5-3. Music album name input window**

C-2) Click [OK] to register the album name in the music album selection input combo box (Figure 5-1 ⑤). See Figure 5-4.

Figure 5-4. Music album selection combo box

C-3) Select the album from the music album selection combo box. (If any music file is available in the selected music album, it will be displayed in the music file list window.)

D. Editing music album in the navigation set

D-1) Select the music album to change its name from the music album selection combo box.

D-2) Click the "Edit music album" button (Figure 5-1 ③) and input the album name to change. See Figure 5-5.
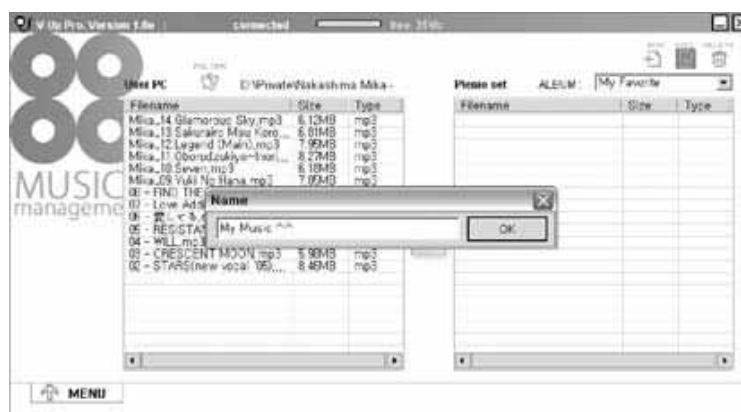

Figure 5-5. Music album name edit window

D-3) Click the [OK] button to register the edited album name in the music album selection combo box. See Figure 5-6.

Figure 5-6. Edited music albums selection combo box

V-Up Pro

E. Deleting music album from the navigation set

E-1) Select the music album to delete from the music album selection combo box.

E-2) Click the "Delete music album" button (Figure 5-1 ④).

E-3) If no music file is available in the selected music album, the music album will be deleted.

E-4) If any music file is available in the selected music album, the Confirmation window will appear. See Figure 5-7.
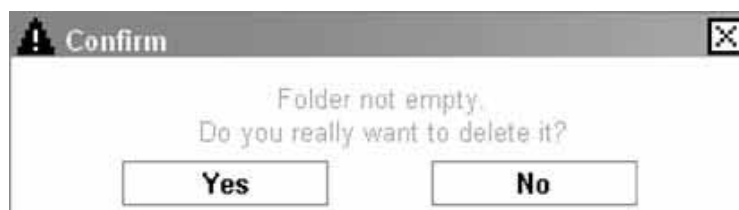
Figure 5-7. Music album deletion confirmation window

E-5) Click the [Yes] button to delete the selected music album.

Note	All music files in the selected music album will be removed from the navigation set.

F. Copying music file to the navigation set

F-1) Select the music album to copy from the music album selection combo box. If no music album is available, the new music album must be created in advance.

F-2) Open the music file in the user PC. (See "Opening music file from the user PC.")

F-3) Select the music file to copy from the "Music file in the user PC" list window. (Multiple selections are supported. See Figure 5-8.)
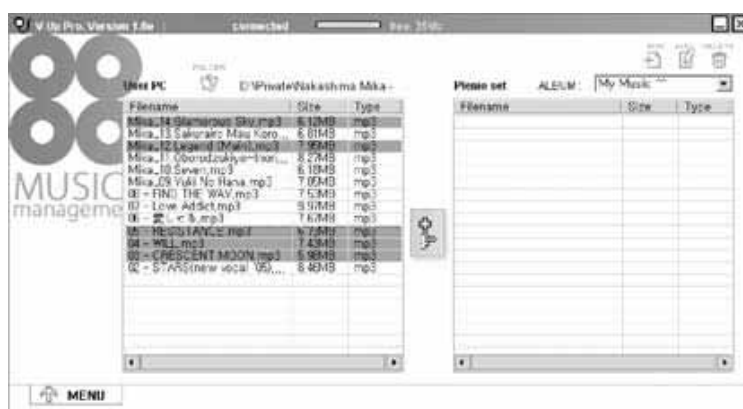
Figure 5-8. Selecting music file in the user PC

F-4) Click the "Copy music file" button (Figure 5-1 ⑥) button.

F-5) While the file(s) is being copied, the file copy progress bar (Figure 5-9 ①) will be displayed.

F-6) When file copying is complete, the copied music file will be displayed in "Music file in the navigation set" list window.

G. Cancelling music file copy

G-1) To stop file copy while in progress, click the [Cancel] button (Figure 5-9 ②).
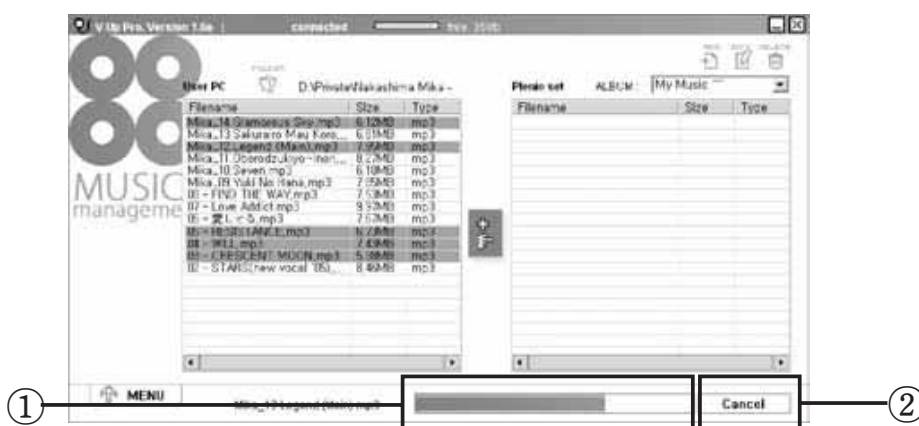
Figure 5-9. Music file copy

V-Up Pro

H. Deleting music file from the navigation set

H-1) Select the music file to delete from the "Music file in Plenio set" list window.
      (Multiple selections are supported.)

H-2) Click the "Delete music file" button (Figure 5-1 ④).

H-3) The selected music file will be deleted.

6. Bitmap Management

A. Execution

A-1) Click the "Bitmap Management" icon in the V-Up Pro main window. (See Figure 6-1.)
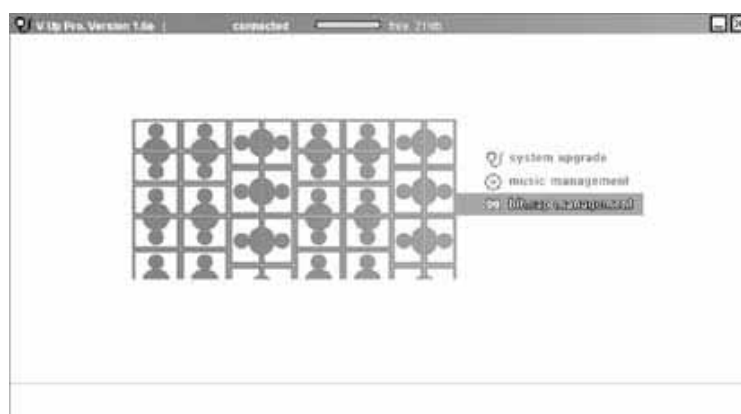
Figure 6-1. Selecting "Bitmap Management"

A-2) The screen shown in Figure 6-2 will appear.
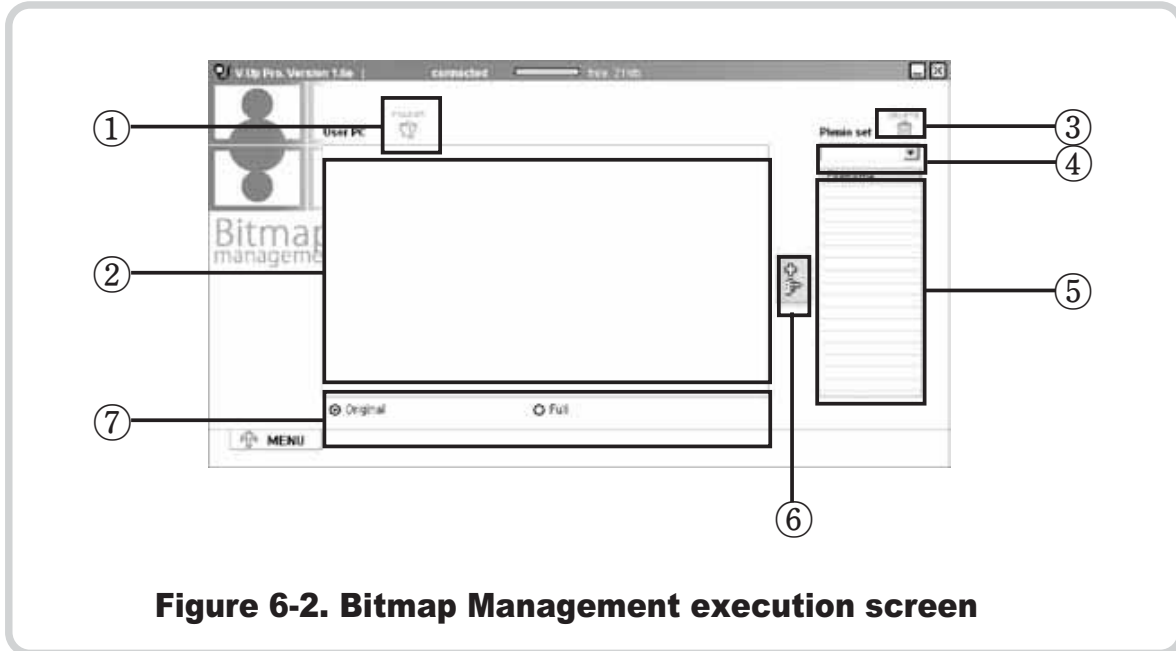
Figure 6-2. Bitmap Management execution screen

① Opens the image file from the user PC.

② Displays the image file.

③ Deletes the image file from the navigation set.

④ Background image/Slide show folder selection combo box.

⑤ List of the image file(s) in the selected folder

⑥ Image file copy button

⑦ Radio button to select the Image file output type

B. Opening image file from user PC

B-1) Click the "Open image file" button and select the image file to open.

B-2) Image will be resized to fit into the the navigation set display resolution. See Figure 6-3.

★ Supported image file format : bmp, jpg

★ The navigation set supporting resolution : 480x234

Figure 6-3. Displaying the selected image file.

C. Resizing image

C-1) You can select 1) Keep aspect ratio, or 2) Full screen image before saving it.

C-2) Use the radio button that set the image file output format (Figure 6-2 ⑦) to change the display type.

Example 1. Image with aspect ratio	**Example 2. Full screen image**

D. Selecting target folder to save in the navigation set

D-1) Select the target folder to save using the "Select background/slide show folder" combo box. See Figure 6-4.

  (1) Background folder : Saves the bit map file that can be a background image of the navigation set.

  (2) Slide show folder : Saves the bit map file that composes the slide show.

Figure 6-4. Selecting target folder

D-2) If any bit map file is in the selected target folder, the file will be displayed in the image file list window (Figure 6-2 ⑤). See Figure 6-5.

Figure 6-5. List of file(s) in the background folder

E. Copying image file to the navigation set

E-1) When you click the "Copy image file" button (Figure 6-2 ⑥), the image file name input window will appear. See Figurer 6-6.

Figure 6-6. Image file name input window

E-2) The image file displayed in the output window (Figure 6-2 ②) will be saved in the target folder with the entered name.

F. Previewing bit map in the navigation set

F-1) The image file list window (Figure 6-2 ⑤) displays the list of image files in the selected
target folder, as well as provides the image file preview function.

F-2) Select one image in the image file list window (Figure 6-2 ⑤).

F-3) When the image file is opened (See Figure 6-7), the selected image file will be displayed in
the image file display window. See Figure 6-8.

Loading...

Figure 6-7. Image file loading status

Figure 6-8. Image file opened from the navigation set

G. Deleting image file from the navigation set

G-1) Select the image file to delete from the "image file in the selected folder" window.
(Multiple selections are supported.)

G-2) Click the "Delete image file" button (Figure 6-2 ③).

G-3) The selected image file will be deleted.

Downloading Navi or OS

You can download ActiveSync installation file and various download files from the DVD-ROM disc.

What is V-Up Pro?

V-Up Pro is the Navigation System management program and performs the following functions.

1. Managing the music files (MP3, WMA, and WAV)

2. Managing background images and slide shows

▶ You can download ActiveSync and the latest version of ActiveSync from the dvssales
   web site.

▶ Connect Navigation System to the PC using the USB cable included in the product package.

▶ You can use various functions when you run the installed V-Up Pro program.

Navigation

Upgrading Navigation System

Specification

Item	Details	Remark
OS	MS WINDOWS CE.NET 4.2	
CPU	SAMSUNG S3C2440A	
RAM	64M Bytes	
FLASH	512M Bytes	
DISPLAY	7" TFT LCD (Touch screen support)	
AUDIO	Internal speaker (1 watt) Line-out output Connect to the car audio using	
GPS module	SiRF star III GPS engine, external type	
GPS sensitivity	First start sensitivity: -134dBm Restart sensitivity: -146dBm Sensitivity in motion: -153dBm	
Input power	12V, 1A	
Temperature	In storage: -35 ~ 75°C In running: -10 ~ 60°C	
Size	182mm × 117mm × 34.2mm	
Weight	493g	

Customer support and Product Enquiry

The product warranty period is calculated from the date of product purchase. Therefore, make sure to write down the purchase data and keep your sales receipt for proper after service.

[If the product purchase date cannot be known, the product warranty period will start 3 months from the manufacturing date or import customs clearance date.]

Customer Service Center

Customer service and complaint reporting
You can make an enquiry or ask advice about the product through a phone call or in the web site.

DVS SALES,INC   1180 ASTER AVE, SUNNYVALE, CA 94086

TEL : 408 260 3303

FAX : 408 260 3304

EMAIL : cs.dvs@dvs.co.kr

HOME PAGE : www.dvssales.com

Limited Warranty

One(1) Year Limited Warranty

WHO IS COVERED?

Warranty repair is one (1) year limited warranty coverage :
* Parts and labour are included under warranty repair.

This warranty is extended to the original retail purchaser for products purchased and used in the U.S.A.

WHAT IS COVERED?

NOTE: If you don't have proof of purchase, then your unit will be considered out-of-warranty. Out-of-warranty repairs will be charged at a flat labor rate, including any necessary parts. This warranty covers all defects in material and workmanship in this product.

WHAT IS EXCLUDED?

This warranty does not cover:

* Labour charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
* Product repair and / or part replacement because of misuse, accident, unauthorised repair or other cause not within the control of its manufacturer.

* Modification or adaptation to this product to enable it to operate in any country other than the country for which it was designed, manufactured, approved and / or authorised, or repair of products damaged by these modifications.

* Incidental or consequential damages resulting from the product. (Some states do not allow the incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)

WHAT TO DO?

1. Before you contact for service, review your owner's manual. A slight adjustment of any custom controls or connections may save your time.

2. For more information, please contact us by the following method :
* Contact the homepage at www.dvssales.com

MAKE SURE YOU KEEP

Please keep your sales receipt or other document showing proof purchase. Also keep the original box and packing material in case you need to return your product.

MODEL # _____

SERIAL # _____

CUSTOMER SUPPORT

This warranty gives you specific legal rights.
You may have other rights which vary from state to state.