# Important Safety Instructions



## CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN!





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



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric to persons.

## **CAUTION**

- To reduce the risk of electric shock, do not remove the cover (or back). No
  user-serviceable parts inside. Refer servicing to qualified service personnel. Unplug
  the product from the wall outlet before servicing or when it is unused for a long
  period of time.
- The manufacturer should not hold responsibility for the damage caused by any substitutions and modifications of the product without authorization from the manufacturer or authorized unit.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

#### WARNING

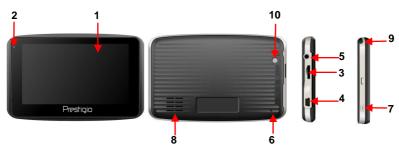
The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

# Accessories

## RoadScout 3110/4110/5110- Accessories List

| ITEM  | NAME   | QTY |  |
|---|--|-----|--|
| 2   | Car Charger                                    | 1   |  |
|   | Mounting Cradle                                | 1   |  |
|   | USB Cable                                      | 1   |  |
|   | Touch Pen                                      | 1   |  |
|   | Leather Carrying Case<br>(GeoVision 5120 Only) | 1   |  |
| Ferencia Co   | Driver/Documentation CD                        | 1   |  |
| Perango<br>Emanin<br>Emanual  | User Manual                                    | 1   |  |
| Final Control | Warranty Card                                  | 1   |  |

#### Front and Side View



#### 1. LCD Touch Screen

Tap the screen with touch pen or finger to select menu commands or to enter information.

#### 2. Battery Status Indicator

The indicator glows in bright amber color when battery is fully charged and in red color when charging.

#### 3. microSD Slot

Receives microSD memory card for data access or memory expansion.

#### 4. Mini-USB Port

Connects to USB Cable for data access or battery charging

#### 5. Headphone Port

Connects to stereo headphones or headsets.

#### 6. Reset Button

Press to restore system to factory default settings.

#### 7. Power Button

Press to power ON/OFF device.

#### 8. Speaker

Emits sound, voice or music.

#### 9. Touch Pen

Used for writing on the LCD Touch Screen.

#### 10. Backlight Button

Press to illuminate the LCD.

## **Device Connection**



#### NOTE:

Please always make sure that the device and any other external device connected to the device are powered off and unplugged from the power supply before attempting to connect the device to any external device.

## Inserting microSD Card





- To insert a microSD card, place connector towards device and card label towards the front side of the device.
- To remove a microSD card, gently press the edge of the card to release the safety lock and pull the card out of the slot.



#### NOTE:

Please always make sure that no application is accessing the microSD card before extraction.

#### Charging

#### 1. Connecting to External USB Device

- Flip open the protective rubber cover towards the front of the device.
- Insert USB connector into the appropriate USB port.
- Insert the other USB connector into USB port on PC to start charging.

## **Device Connection**

#### 2. Connecting to Car Charger

- Flip open the protective rubber cover towards the left side of the device.
- Insert USB connector into the appropriate USB port.
- Insert car charger connector into vehicle 5V accessory/cigarette socket to start charging.



Please connect the car charger to vehicle 5V accessory/cigarette socket after vehicle engine is started to protect the device from sudden surges in current.

## **Connecting to Earphones**

- Flip open the protective rubber cover towards the front of the device.
- Insert earphone plug (not included) into the appropriate earphone port to switch audio output from device speaker to earphone.



#### NOTE:

Excessively loud volume is potentially detrimental to hearing. Please turn down the volume before connecting the earphone and gradually turn up the volume to a comfortable level.

# Cautions on Battery Charging

## About Rechargeable Battery

The device is equipped with a built-in rechargeable battery. Please fully charge the battery (for at least 8 hours) before initial use. The battery status indicator glows in red color when charging and turns bright amber color when charging is complete. Charging time is approximately 2 hours.

## Working conditions and precautions for the rechargeable battery

- Device with new batteries should be fully charged before initial use.
- Battery should only be used and charged when temperatures are between 32° ~ 100°F.
- It is not necessary to start charging the device before the battery is fully discharged.





Please connect the car charger to vehicle 5V accessory/cigarette socket after vehicle engine is started to protect the device from sudden surges in current.



#### NOTE:

- Do not operate the device while driving.
- Please select an appropriate location on the dashboard or windshield where the device will not obstruct driver field of vision.

## **Device Mounting Procedures**

The device can be securely mounted on vehicle dashboard or windshield with the mounting cradle included. Please follow procedures below to operate mounting cradle:

- Select an appropriate location on windshield or dashboard where the device and mounting cradle will not obstruct driver field of vision.
- Please also make sure that the device has a clear view of sky to attain best GPS reception.



- Place device on the bracket with bottom positioned on the appropriate socket.
- Push on the top edge to securely install device onto the cradle.
- Lift the suction cup lever and press the suction cup at desired location.
- Press down the suction cup lever to secure the mounting cradle on the surface
- Rotate the knob to adjust device to desired viewing angle.

## To Dismount Device

- 1. Push the tap on top of the mounting cradle to release the device.
- Lift the suction cup lever to easily remove the suction cup from windshield or dashboard.

# **Getting Started**



- Press and hold Power Button to turn on device.
- Shortly after the greeting screen is shown, the main menu will be displayed.
- Tap the corresponding buttons with touch pen included to navigate various functions.
- Press and hold Power Button to turn off the device or to allow device to enter sleep mode.

# **Getting Started**





Displays volume control menu



Zooms in



Rotates map towards surface



Zooms out



Rotates map towards 2D display



Starts GPS logging



Displays menu with route or trip functions



Stops GPS logging



Displays compass aligning to the direction of device



Rotates map counter clockwise



Displays main menu



Rotates map clockwise



Displays time; touch and hold to switch to GPS speed

## **Navigation**







- Menu displays main menu.
- 2. starts the search based on given input.
- Select the desired location from given search results by taping the appropriate entry from the list.
- 4. Selected location is shown on the map.
- 5. If a desired location is chosen it can be used for the route calculation
- Navigate to sets location as destination, calculates the route and starts guidance



#### NOTE:

Guidance to location assumes calculation from current GPS position to given destination. Current position is determined by GPS signal – GPS signal availability is denoted by GPS.

## Guidance

By choosing guidance item Navigate route is calculated and guidance is started. Guidance window is shown below:





Displays next maneuver with real geometry of streets in enlarged view. This window can be closed by touching little triangle in the upper left corner



Distance to go



Estimated time of arrival



Time to go



Street/road/square name after next maneuver



Shows the map with current position in the middle of the screen



Shows the map with north position up



Shows the quality of GPS signal and battery status. Icon also functions as the switch for window changing (guidance, tachometer, and GPS signal summary window)



#### NOTE:

Display of last three fields is changed with the street/road/square name display next on route. In order to stop the change field needs to be touched. To resume the change field needs to be touched again.

# Screen Brightness Adjustment

Brightness of the screen can be adjusted for different lighting conditions - very bright when the sun is shining or darker in the tunnels. Adjustment is done as follows:



Brings up main menu with possible actions. Find ▶ Settings on the list.



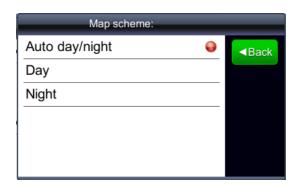
Brings up lower part of the list of actions where ▶ Settings can be found

Settings

Allows change of settings

► Map

Brings up map display settings menu and choice of the map.





#### NOTE:



Guidance to location assumes calculation from current GPS position to given destination. Current position is determined by GPS signal – GPS signal availability is denoted by GPS. In case of calculating the route from other, non GPS position we use word TRIP instead of ROUTE (Trip overview, Trip summary, Places along the trip, etc)

| ► Route Overview         | Shows the route on the map  |  |  |
|--------------------------|---|--|--|
| ► Route Summary          | Review of route data  |  |  |
| ▶ Places along the route | Searches for POIs along the route   |  |  |
| ► Drop next via point    | Calculates the route by dropping next via point   |  |  |
| ► Avoid next             | Calculates the route by avoiding next 1, 2, 5, 10, or 20 KM on the existing route (in case of traffic jams or constructions |  |  |
| ► Delete this route      | Deletes the actual route  |  |  |
| ▶ Via points list        | List of via points. Allows optimization of the route using traveling salesman algorithm                                     |  |  |
| ► Maneuvers list         | Gives the list of all maneuvers on the route  |  |  |
| ► Route & vehicle types  | Brings up route settings menu   |  |  |
| ► Avoid road types       | Calculate route by avoiding certain types of roads  |  |  |
| ► Exclude road types     | Excludes the road types   |  |  |
| ► Save this route        | Saves the route   |  |  |

## **Changing Route Destination or Adding Via Points**







To change route destination or add via point:

- Brings up main menu with
   possible actions list. Choose search
   method as needed after acquiring
   results choose appropriate route.
- 2. Brings up possible actions for a chosen result

Search along the route (objective is most commonly finding gas stations, restaurants or accommodation is performed as following:

- Route Brings up main menu with possible actions list. Choose search method as needed – after acquiring results choose appropriate route.
- Places along the route: brings up menu with POI categories list.

Touching a selected result displays context menu. In this case **Add as via point** should be selected.

## Changing the Order of Via Points

If you need to recalculate route with existing parameters (via points and destination) but with changed via points order, please do the following:



Route Brings up menu with the list of possible tasks.
 Deletes via point.
 Moves via point up.

Moves via point down.

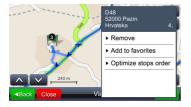
Optimize Stops Order (Via Points Order)

If you need to recalculate optimal route and wish to keep via points, it can be done as following. During this operation starting point becomes finishing point.

First, define all needed parameters – starting point and via points/destinations. It can be done by adding destinations in succession. In other words, chosen location is set as starting point, another location is added as destination and by adding third location as destination second location becomes via point. Route is calculated automatically:







After all needed and chosen are set as route parameters, and route is calculated, route optimizing is done as following:

- 1. Route Brings up menu with the list of possible tasks.
- 2. Choosing any point on route.
- 3. Brings up menu with possible tasks and route optimizing.
- Optimizing via points order recalculates new route and keeps all via points

#### NOTE:

Start point becomes finish point after the operation is completed.

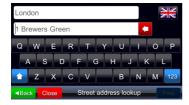
#### **Find Location**

► Find location

Brings up search menu. It is possible to search by address, city only (city center), postal code, named junction and longitude and latitude.

**Special characters**: it is not necessary to enter special characters ( $\check{c}$ ,  $\check{d}$ ,  $\check{z}$ ,  $\ddot{u}$ ,  $\ddot{o}$ ). Replace special characters with (c, z, d, u, o)

Find Street address should be used for searches when street and house number are known.





When searching address, two input fields are offered, and if there is no text entered, the content of them will be sample city/town name in the first, and sample street address (including sample street number, if map contains street numbers) in the second. This sample address changes as current country is changed (via flag button).

The ordering of the house number (before or after the street name) suggested is the ordering that is correct for the map of the currently selected country. The user should enter desired address in format specific for the currently selected country (if the user wants to search the house number at all).

Once a letter is typed in any of the two input fields, the sample data (grey) will disappear.



If a house number does not appear in the suggestion, the map data for the current country most likely does not contain house numbers data at all, so entering a house number would be unnecessary.

The sample name of the city/town is also provided when **Find city center** is used.

#### Find Place (POI)

#### ► Find place

Brings up menu for search of POIs. The whole or the partial name of the POI user is interested in should be entered. The search is performed for the selected country regardless of the POI category, or its vicinity.



1. INA 430 m
Savezne Republike Njemačke, 10000 Zagreb,...

2. INA 470 m
Savezne Republike Njemačke, 10000 Zagreb...

3. INA 1.0 km
10000 Zagreb, Hrvatska

4. INA 2.1 km
10000 Zagreb, Hrvatska

5. INA 2.2 km
Avenija Marina Držića, 10000 Zagreb, Hrvatska

■Back INA (31)

Close

By clicking button, POIs will be re-searched, this time based not only the name, but the distance to current position also.

Results obtain with criteria included have distance to current position included, and sorting button changes to by clicking it the original search will be performed again (the same mechanism is applied for results of **Find city center** search).



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POIs can also be searched near by clicking at some point on map and selecting **Find nearest place**.

The loaded dialog offers list that begins with **Find by name**, and is followed by the list of categories.

If some category is selected, all POIs of that category that are near are selected and displayed as search result.

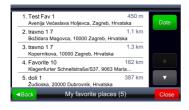
If **Find by name** is selected, new input dialog is shown where user can type name of the POI that will be looked for in the vicinity.

## My Favorite Places

► My favorite places

Displays the list of all locations saved as favorites. Any location can be saved as favorite independently of the location selection method. Add to favorites saves selected location from search results into favorites.







Initial sorting of results is "temporal", i.e. last recently added favorites are shown first. By clicking button, they will be sorted alphabetically, and the button will change to button, meaning user can choose to sort them by distance.

By clicking Sort by distance button, the button changes to button, meaning user can sort result back to temporal order (and distance to favorite is display in result list).

By selecting location on the list (touching the item on the list), location is shown on the map.

## **My Recent Destinations**



Up to 99 most recent destinations are saved in recent folder. Destinations are saved automatically and can be retrieved for later use (as starting points, destinations, can be saved to favorites, etc.). The same sorting buttons appear as for the favorites.

#### **GPS logs**





Turns GPS logging on/off.

▶ GPS logs

Brings up the list of save logs.



Touching any position (arrow) will display recorded time and speed. The brightness of the arrow denotes the speed (darkest arrow represents the position with the lowest speed and brightest arrow represents the position with the highest speed).

## Menu

Brings up menu with possible actions.

- ► Speed graph
- Brings up speed graph.
- ► Altitude graph

Brings up altitude graph. GPS altitudes must be taken only as orientation because of large error (error can range up to 30M and more).

► Convert to KML

Creates file that can be used for showing trips on Google mapping tools.

## GeoPix Images

► GeoPix images

Brings up collection of geocoded photos. Geocoded photos are photos that contain GPS position. For easy work with such photos all photos must be saved in directory **Photos**. **Photos** directory must be stored in a directory with viaGPS3.1 executable version.





Geopix collection can contain other collections.

The choice of collection brings up the list of photos in the collection.

By selecting one photo (touching the photo) a full screen of the photo is enabled and Map icon shows the position of where the photo was taken on the map.

## My saved routes

► My saved routes

Brings up menu with saved trips





Tapping the field on the list displays start point, via points and destination on the map.

Selectin **Load** loads the route with all via points. Selecting **Drive this trip** calculates the route and starts navigation. **Drive this trip** replaces starting point with current GPS position.

#### **▶** Settings

Brings up settings menu.

#### **Map**



Selecting **Map** brings up menu for adjusting map brightness and map area.



Brightness can be set to **Day**, **Night** or **Automatic** mode.

Automated mode takes into account dusk/dawn time on the given geographic position depending on season.



**Map** option is used when distinct maps exist on the device, e.g: Croatia only or whole Europe. Selecting map defines which data are taken into account by system.

#### Map POIs

► Map POIs

Brings up menu for POI category selection shown as icons on the map. Many categories can be selected from the menu.



The first item on the list will always be **My favorite places**, and then the list of POI categories follows. Just below Back button is button to quickly select/deselect all categories.

#### **Alerts**



Brings up menu for sound alarms (turning on or off) in the case of over speeding (if such data exists) or in the case of getting close to speed control cameras (if such data exists and using such data is permitted)

#### **Volume**



This menu can be brought up by touching in main window or guidance window.

## Display (available on some devices)



Adjust screen brightness during day/night mode.

#### Time Setting



Adjust time.

## <u>Language</u>



Language settings automatically adjust guidance voice language.

#### Units



Choice of units affects time format and distance units.

#### Keyboard



Language settings automatically change keyboard layout.

#### Restore Defaults



Restore system settings to factory default values.

## Music Mode



#### NOTE:

Do NOT store audio files in the built-in flash storage for it may result in system malfunction. The flash storage is used to store system data and should not be tempered at anytime.

## Reminders regarding music playback function

- Audio files should be loaded in the SD card before connecting to device.
- Audio files can be imported to the SD card from PC by a variety of programs such as Windows Media Player.
- The loading process should be performed independently from the device.
- Do NOT attempt to use the device as a card reader device.

## **Playing Music**





- Insert SD card with audio files loaded before powering on the device.
- Shortly after the greeting screen is shown, main menu will be displayed automatically.
- Tap on MultiMedia icon to enter submenu.

## Music Mode



 Tap on Music icon to enter music files list.

## **During Music Playback**



- Tap on to play.
- Tap on to pause.
- Tap on to stop playback.
- Tap on to adjust volume.
- Tap on to return to music files list.

## Video Mode



#### NOTE:

Do NOT store video files in the built-in flash storage for it may result in system malfunction. The flash storage is used to store system data and should not be tempered at anytime.

## Reminders regarding video playback function

- Video files should be loaded in the SD card before connecting to device.
- The loading process should be performed independently from the device.
- Do NOT attempt to use the device as a card reader device.

## **Playing Video**





- Insert SD card with video files loaded before powering on the device.
- Shortly after the greeting screen is shown, main menu will be displayed automatically.

 Tap on MultiMedia icon to enter submenu.

## Video Mode



 Tap on the Video icon to enter video files list.

#### **During Video Playback**



- Tap on to return to video files list.
- Tap on to play.
- Tap on to stop playback.
- Tap on 
   to pause.

- Tap on to turn to full-screen mode.



#### NOTE:

Do NOT store photo files in the built-in flash storage for it may result in system malfunction. The flash storage is used to store system data and should not be tempered at anytime.

## Reminders regarding photo viewing function

- High resolution image files may considerably slow down device reading speed.
   Image files with resolution 640 X 480 or lower is recommended.
- Image files should be loaded in the SD card before connecting to device.
- The loading process should be performed independently from the device.
- Do NOT attempt to use the device as a card reader device.

#### Viewing Photo



- Insert SD card with image files loaded before powering on the device.
- Tap on Picture Viewer icon to enter photo list and select the desired file.

## Picture Mode

## **During Photo Viewing**



- Tap on **@ @** to zoom image in / out.
- Tap on to rotate image.
- Tap on to display in full-screen mode. Double tap the screen to resume.
- Tap on **1** / **1** to return to previous / skip to next image file.

## **Document Mode**



#### NOTE:

Do NOT store document files in the built-in flash storage for it may result in system malfunction. The flash storage is used to store system data and should not be tempered at anytime.

## Reminders regarding Document Viewer function

- Document files should be loaded in the SD card before connecting to device.
- The loading process should be performed independently from the device.
- Do NOT attempt to use the device as a card reader device.
- The device supports the format of .TXT only.

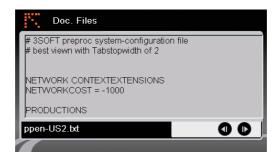
## Reading Text



- Insert SD card with text files loaded before powering on the device.
- Tap on **Document Files** icon to enter document files list.
- Select the desired text.

## **Document Mode**

## **During Document Playback**



- Tap on to return to document files list.



 Tap on Settings icon to enter submenu.

#### Language



- Tap on on submenu to enter language setting.
- Tap on / to cycle through language options.
- Tap on / to cancel / confirm.

#### Date/Time



- Tap on to enter date / time setting.
- Tap on / to adjust the corresponding date / time.
- Tap on \_\_\_\_ / \_\_\_ to cancel / confirm.

#### **Volume**



- Tap on to enter volume setting.
- Tap on (a) / (b) to adjust volume.
- Tap on / to cancel / confirm.

#### **Backlight**



- Tap on on submenu to enter backlight setting.
- Tap on / to adjust backlight brightness.
- Tap on to cancel / confirm.

#### Calibrator



- Tap on **Calibration** icon on submenu to enter the screen calibrating menu.
- Tap the center of "+" as it moves around the screen. Tap the screen as instructed after "+" has moved through a cycle (Center → Top left corner → bottom left corner → bottom right corner → top right corner).

# Troubleshooting

Take steps described in the tables below to solve simple problems before contacting customer service.



#### NOTE:

Immediately turn off the device and disconnect the power adapter if the device is not working properly. Never try to repair the unit without authorized professionals for it may damage the unit.

| PROBLEM   | POSSIBLE CAUSE  | POSSIBLE SOLUTION   |  |
|---|---|---|--|
| Users can't turn on the unit.                             | The adaptor doesn't connect well.                       | Connect the adaptor correctly.  |  |
|   | The built-in rechargeable battery is weak.              | Use the adaptor to supply power or charge the battery.  |  |
|   |   |   |  |
| There is no sound.  | The volume may be turned down or mute.                  | Turn up the volume or turn on the sound output.   |  |
|   |   |   |  |
| There is no picture.                                      | The brightness may be turned down.                      | Adjust the brightness of the LCD.   |  |
|   |   |   |  |
| The unit can't receive satellite signals or can't orient. | The unit may be obstructed by buildings or metal block. | Make sure to use the unit out of room; if in the vehicle, you can use the external GPS antenna to solve this problem. |  |

# **Troubleshooting**

#### **PROBLEM**

The unit can receive signals now but can't then; signals received are not stable.

#### POSSIBLE CAUSE POSSIBLE SOLUTION Use the adaptor to supply The built-in rechargeable power or charge the battery is weak. battery. The unit may be obstructed Remove the veil. by veil, such as heat insulation paper. Avoid great swing of the

unit.

Swing of the unit is too

great.

## **PC** Connection

To establish connection with PC for data access and synchronization, please execute setup file included in the Driver/Documentation CD or download the file from Microsoft website to install:

Microsoft Active Sync® software for operating system Microsoft XP or earlier versions

(http://www.microsoft.com/windowsmobile/en-us/downloads/microsoft/activesync-downloads.mspx)

and/or

**Microsoft Mobile Device Center®** software for operating system **Microsoft Vista** (<a href="http://www.microsoft.com/windowsmobile/en-us/downloads/microsoft/device-center-downloads/microsoft/device-center-download.mspx">http://www.microsoft.com/windowsmobile/en-us/downloads/microsoft/device-center-downloads.mspx</a>).

Please refer to its user manual for more detailed instructions.