Thank you for purchasing this AVN System.

This user manual explains how to use HAVN-100 Series. Before using the product, read the contents of this user manual carefully and use this product safely.

- The screens shown in this manual may differ with the actual screens of the product.
- The design and specification of this product may change without prior notification for product improvement.
- When transferring the vehicle to another individual, include this user manual so that the next driver can continue its use.

**DOLBY**

Manufactured under license from Dolby Laboratories
"Dolby" and the double-D symbol are trademarks of Dolby Laboratories

**iPod**

iPod is a registered trademark of Apple, Inc.

**DTS**

Manufactured under license under U.S. Patent #’s : 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, Symbol and DTS 2.0 Channel are trademarks of DTS, Inc. © 1996-2007 DTS, Inc. All Rights Reserved.
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1. PRE-OVERVIEW

Introduction

Important information about this manual

This user manual contains instructions related to safety. Closely observe and comply with all of the safety instructions found within this manual.

WARNING!

Disobeying the warnings listed within this user manual may cause fatal or serious injuries. Warnings indicate matters which may directly lead to accidents.

CAUTION!

Disobeying the cautions listed within this user manual may lead to accidents or cause injury. Cautions indicate matters which may lead to vehicle damage or malfunction.

INFORMATION

Information which the user must be aware or allows for more convenient use of the device.

Precaution for safe usage

WARNING!

- Do not operate the AV/AVN system while driving.
- Do not dismantle, assemble, or modify the AV/AVN system.
- Do not watch the screen for prolonged periods of time while driving.
- Set the volume to a level which allows the driver to be aware of external conditions.

CAUTION!

- Do not operate the AV/AVN system for prolonged periods of time with the vehicle ignition in ACC. Such operations may lead to battery discharge.
- Be careful not to spill water or insert foreign objects into the device.
- Do not cause severe shock to the device. Direct pressure onto the front side of the monitor may cause damage to the LCD or touch panel.

- In case of product malfunction, please contact your place of sale or service centre.
- When cleaning the touch screen, make sure to turn off the device and use a dry and smooth cloth. Never use abrasive materials, chemical cloths, or solvents (alcohol, ammonia, benzene, thinners, etc.) as such materials may damage the device panel or cause colour and quality deterioration.

This indicates a button on the control panel.
1. PRE-OVERVIEW

AVN SYSTEM Controls and functions

Control panel

1. Power / Volume control knob
   - Push knob (over 0.8 second) : Turns the power off.
   - Push knob (under 0.8 second) : Each time the knob is pressed, the Audio is turned on and off.
   - Tune knob : The range of volume adjustment is between 0 ~ 35.

2. FM/AM button
   Each press will change the modes in the following order: FM1 → FM2 → AM

3. MEDIA button
   Each press will change the modes in the following order: DVD(CD/MP3/DVD) → AUX → USB(iPod)

4. DARK button
   Each press will change the modes in the following order: Day Mode → Night Mode → LCD Off → Day Mode …

5. SEEK/TRACK Up/Down button
   - SHORT KEY (less than 0.8 second)
     - FM/AM Mode : Automatically searches for the previous or next broadcast frequency and starts playing.
     - RADIO(RDS) Mode : receives the previous or next channel.
     - CD Mode : Plays the previous or next track.
     - MP3, USB Mode : Plays the previous or next file.
     - DVD Mode : Plays the previous or next chapter.
     - iPod Mode : Plays the previous or next song.
LONG KEY (over 0.8 second)
- FM/AM Mode: Quickly moves through the frequencies while the button is pressed. Once released, automatically searches for broadcasts which can be received.
- RADIO(RDS) Mode: search for the desired frequency.
- CD Mode: REW/FF the current playing track.
- MP3, USB Mode: REW/FF the current playing file.
- DVD Mode: REW/FF the current playing chapter.
- iPod Mode: REW/FF the current playing song.

TUNE/Search knob
- FM/AM Mode: Turn the knob to search for the desired frequency. Press the knob to receive the selected frequency.
- CD Mode: Turn the knob to search for the desired track. Press the knob to play the selected track.
- MP3, USB Mode: Turn the knob to search for the desired file.

WARNING!
Always give your full attention to driving. Avoid operating your system in ways that could distract you from driving your vehicle.
1. PRE-OVERVIEW

Sound setting

- **Displays the Sound setup screen**
  Press the **SETUP** button on the main screen of each AV mode (FM/AM, CD, MP3, DVD, USB, iPod) to display the Sound setting screen.

- **FAD/BAL**
  The position of the sound can be adjusted by using the up-down and left-right (↑, ↓, ←, →) buttons on the left side of the screen.

- **BAS/MID/TRE**
  The BAS/MID/TRE can be adjusted by using the left/right buttons (←, →) of each control.

- **Auto volume control ON/OFF**
  Each time the **Auto Vol** button is pressed, the Auto Volume Control function is turned on or off.

- **Touch screen Beep ON/OFF**
  Each time the **Beep** button is pressed, the beeping sound that follows each press on the screen will turn on.

Display setting

- **Displays the Display setup screen.**

- **Brightness / saturation / hue / contrast**
  Use the left/right buttons (←, →) for each control to make adjustments.

- **Ratio**
  1. Press the **Ratio** button.
  2. Press the desired aspect ratio.
     The current selected aspect ratio is highlighted.
**1. AV SYSTEM**

**Operating the FM/AM radio**

### Listening to the FM/AM radio

1. Press the \[BAND\] or \[MODE\] button on the control panel. The FM/AM radio band of the most recently selected will be displayed.

2. Press the \[BAND\] or \[MODE\] button to change the desired radio band. Each press will change the bands in the following order: FM1 → FM2 → AM

3. Select the desired broadcast frequency.

### Selecting broadcast frequency

(a) Selecting a Broadcast frequency through SEEK
Press the \[SEEK \<\] or \[TRACK \>\] buttons on the control panel for less than 0.8 second. Once the SEEK function is operating (SEEK indicator blinking), the following or previous broadcast frequency with superior reception will be searched automatically.

(b) Selecting a broadcast frequency through manual search
Turn the \[TUNE\] knob on the control panel in clockwise or anticlockwise direction. Each click on the \[TUNE\] knob will increase or decrease the frequency by 1 step (FM: 0.05 MHz, MW: 9 kHz, LW: 1 kHz).

### Storing preset

(a) Manual Storing
1. Select the desired frequency.

2. Press the preset button to store for over 0.8 second. The frequency will then be stored along with a beep sound.

**Operating the RDS radio**

### Listening to the Traffic Announcement

Press the \[TA\] button on the control panel. The TA radio broadcasting from the traffic announcement station will then be activated. The TA indicator will become displayed.

### Selecting Radio Station through the Station List

(a) Pressing the \[LIST\] button
Press the \[LIST\] button on the control panel. Among the channels, select your preferred channel.
2. AV SYSTEM

(b) Pressing the **Update station list** button

Press the **Update station list** button on the control panel. Updating station list will take a few minutes.

(c) Pressing the **Cancel** button

Press the **Cancel** button of the update progress popup window on the control panel and updating of the station list will be canceled.

---

**Operating the CD**

- **Listening to CD music**

  - Press the **DVD** or **MODE** button on the control panel while inserting the CD DISC or with the disc already inserted.

  ![Image](DVDP CD.png)

  - Select the desired track.

  ![Image](DVDP CD.png)

- **Selecting the CD track**

  (a) **Selecting through Track Up / Down**

  Press the **SEEK \(-\)** or **TRACK V** buttons on the control panel for less than 0.8 second. The following or previous track will begin playing.

  ![Image](DVD CD.png)

  (b) **Selecting through search track**

  1. Turn the **TUNE** knob on the control panel in clockwise or anticlockwise direction. Each click on the **TUNE** knob will display the information of the following or previous track. The current playing track will continue to be played.

  2. Press the **TUNE** knob until the desired Track is found. The track will then begin playing.

- **REW/FF tracks**

  Press and hold the **SEEK \(-\)** or **TRACK V** buttons on the control panel for over 0.8 second.
The track will play 20 times faster while holding the button and return to normal playing speed when the button is released.

**Setting Repeat function**
Press the **Repeat** button.
Each press will change the function in the following order: REPEAT → REPEAT OFF → REPEAT
* REPEAT : repeats the current playing track.

**Setting Random function**
Press the **Random** button.
Each press will change the function in the following order: RANDOM → RANDOM OFF → RANDOM
* RANDOM : plays all tracks in the disc in random order.

**Scanning tracks**
Press the **Scan** button.
Each press will change the function in the following order: SCAN → SCAN OFF → SCAN.
* SCAN : scans all tracks in the disc for 10 seconds each.

Press the **Scan** button again to continue listening to the track. The scan will be terminated and the current track will continue to be played.

---

### Operating the MP3, USB

#### Listening to MP3 music

1. Press the **DVD** or **MODE** button on the control panel while inserting the MP3 DISC or with the disc already inserted.
2. Select the desired file.

#### Selecting a file

(a) Selecting through search files

1. Turn the **TUNE** knob on the control panel in clockwise or anticlockwise direction. Each click on the **TUNE** knob will display the information of the following or previous file. The current playing file will continue to be played.
2. AV SYSTEM

Press the TUNE knob at the desired file. The searched file will begin playing.

(b) Selecting through MP3 List

Press the List button.
The file list of the folder for the current playing file will be displayed.

Press the desired menu to return to the main screen and play the selected file.

REW/FF files

Press and hold the SEEK or TRACK buttons on the control panel for over 0.8 second. The file will play 20 times faster while holding the button and return to normal play when the button is released.

Viewing detail information for MP3 file

Press the Info button.
The detailed information (Title, Artist, Album, Genre) for the current playing MP3 will be displayed.

Setting Repeat function

Press the Repeat button.
Each press will change the function in the following order: REPEAT → FOLDER REPEAT → REPEAT OFF → REPEAT
* REPEAT : repeats the current playing file.
* FOLDER REPEAT : repeats the files in the current folder.

Setting Random function

Press the Random button.
Each press changes the setting as follows: RANDOM → FOLDER RANDOM → RANDOM OFF → RANDOM
* FOLDER RANDOM : plays the files in the current folder in random order.
* RANDOM : plays all files in the disc in random order.

Scanning files

Press the Scan button.
Each press will change the function in the following order: SCAN → FOLDER SCAN → SCAN OFF → SCAN
* FOLDER SCAN : plays all files in the current folder for 10 seconds each.
* SCAN : scans all files in the disc for 10 seconds each.

Press the Scan button again to continue listening to the file. The scan will be terminated and the current file will continue to be played.
Operating the DVD

Watching a DVD movie

Press the DVD or MODE button on the control panel while inserting a DVD DISC or with the disc already inserted.

Select the desired Title and Chapter.

Selecting a chapter of DVD movie

(a) Selecting through Chapter Up / Down
Press the TRACK \ or TRACK V button on the control panel for less than 0.8 second. The following or the previous chapter will begin playing.

(b) Selecting through directly searching the title and chapter number

Press the Search button.

Press the TITLE or CHAPTER button.

Input the desired title or chapter number.

Press the DONE button.

The start of the corresponding title or chapter will begin playing.

(c) Selecting through DVD title menu

Press the Title button.

Select the desired menu by using the 4-direction button.

Press the DONE button.

The corresponding screen will be displayed.

Changing voice, caption or angle while playing the DVD

Each time the Voice, Caption, or Angle is pressed, the video will be played with the new settings applied.

REW/FF DVD movie

Press and hold the SEEK \ or TRACK V buttons on the control panel for over 0.8 second. The DVD will play 16 times faster while the button is held and return to normal playing speed when the button is released.

Hiding DVD menu buttons

Press the Hide buttons button.

The menu button and display information will be hidden from the screen and only display the DVD video.
2. AV SYSTEM

**WARNING !**
Always give your full attention to driving. Avoid operating your system in ways that could distracted you from driving your vehicle.

**INFORMATION**
DVDs can be displayed or played on the navigation screen only when the transmission is in Park.

---

**Operating the iPod**

iPod is a registered trademark of Apple, Inc.

- **Listening to iPod music**

- **Selecting an iPod music**
  - (a) **Selecting a song using Up / Down**
    Press the TRACK \₃ or TRACK V button on the control panel for less than 0.8 second.
    The following or previous song will begin playing.

  - (b) **Selecting a song using sequential search**
    - Turn the TUNE knob on the control panel in clockwise or anticlockwise direction.
    - Each click on the TUNE knob will display the information of the following or previous song.
    - The current playing song will continue to be played.
    - Press the TUNE knob at the desired song.
      The searched song will begin playing.

  - (c) **Selecting song via the Menu**
    - Press the MEDIA or MODE button on the control panel if the iPod is already connected.
    - Select the desired song.

---

**REW/FF song**
Press and hold the SEEK \₃ or TRACK V buttons on the control panel or S/Wheel Remote controller for over 0.8 second.
The song will be play faster while the button is held down and returns to normal play when the button is released.
Setting repeat function
Press the [Repeat] button.
Each press will change the function in the following order: REPEAT → REPEAT OFF → REPEAT
* REPEAT : repeats the song currently playing.

Setting random function
Press the [Random] button.
Each press will change the function in the following order: RANDOM → ALBUM
RANDOM → RANDOM OFF → RANDOM
* ALBUM RANDOM : plays the songs in the current playing list randomly in Album units.
* RANDOM : plays all files in the current playing list in random order.
3. BLUETOOTH

Operating the Bluetooth Hands-free

Connecting through the device

When there is no phone registered

1. Press the [CALL] or [PHONE] button on the control panel.

Once the message window appears on the screen, press the [YES] button. Pressing the [NO] button on the control panel will restore the screen displayed prior to pressing the [CALL] or [PHONE] button on the control panel.

2. Once the message window appears on the screen, press the [YES] button. Pressing the [NO] button on the control panel will restore the screen displayed prior to pressing the [CALL] or [PHONE] button on the control panel.

3. Once the "Search Bluetooth Phone screen" becomes displayed, Bluetooth phones (devices) in the vicinity will become searched.

4. Select the list desired for connection from the Search Results screen. If search results do not become displayed press the [Search] button.

5. Input the "Pass key" in the Bluetooth phone and press the [OK] button to connect with the system.

6. The following message window will become displayed if the Pass key was inputted too late or if registration has failed. Press the [YES] button to try pairing again.
When a phone is already registered

1. If there is a Bluetooth phone already registered, press the CALL or PHONE button on the control panel to display the screen shown on the right. Press the YES button to connect the phone.

2. The currently registered phone list will become displayed.

3. Select the Bluetooth phone you wish to connect and press the Connect button.

4. Once connection becomes complete, the Bluetooth icon will change into blue to signify that the connection has been properly completed.

Making a call

1. Use the dial pad positioned on the right side of the PHONE mode screen and input the desired phone number.

2. Press Call button or press the CALL or PHONE button on the control panel to connect the call.

Answering a call

1. The right side of the screen will become displayed when there is an incoming call. Press the CALL or PHONE button on the control panel or the Call button on the screen if you wish to answer the call.

2. The call will become connected.
3. BLUETOOTH

■ Converting call to the Bluetooth phone

1. To convert a call from the Bluetooth Hands-free to the Bluetooth phone, press the CALL or PHONE button on the control panel for over 0.8 seconds or press the Call Transfer button on the PHONE screen.

2. A notification window alerting that the call has been converted to the Bluetooth phone will become displayed.

■ Converting call to the Hands-free

1. To convert a call from the Bluetooth phone to the Bluetooth Hands-free, press the CALL or PHONE button on the control panel for over 0.8 seconds. Pressing the Transferred to Handsfree button displayed on the notification window will also convert the call to the hands-free.

2. Converting the call to the hands-free will make it possible to take the call through the device.

■ Activating Call waiting

1. If another person calls while on a call, a notification window will become displayed as shown above. To answer the second call, press the CALL or PHONE button on the control panel for less than 0.8 seconds or press the Call button on the notification window.

2. The call will convert to the second call.
■ Viewing Recent Calls

1. Press the [Call] button on the PHONE screen or press the [CALL] or PHONE button on the control panel.

2. The recent calls list will become displayed.

3. If there is no recent calls list, the Call button on the screen will become inactive.

■ Connecting Bluetooth

1. Press the [Connection Setup] button on the PHONE screen.

2. The Connection Setup screen is displayed.

3. Select the Bluetooth phone you wish to connect and press the [Connect] button.

4. Once connection becomes complete, the Bluetooth icon will change into blue to signify that the connection has been properly completed.

■ Setting auto connect

1. Press the [Connection Setup] button on the PHONE screen.
3. BLUETOOTH

Press the **Set Auto Connect** button on the Connection Setup screen.

Once the Auto Connection Setting screen becomes displayed, press the button for the desired setting.

Press the **Done** button to save the set value.

**Changing Passkey**

1. Press the **Device Setup** button on the PHONE screen.

2. Press the **Change Passkey** button.

3. The Change Passkey screen will become displayed.

4. Input the desired number and press the **Done** button. Only 4-digit numbers can be used as the Passkey.

**Setting Hands-free volume**

1. Press the **Device Setup** button on the PHONE screen.
2 Press the **Volume Setting** button on the Device Setup screen.

3 Use the +, - buttons to set the desired volume.

**Initialising Bluetooth**

1 Press the **Device Setup** button on the PHONE screen.

2 Press the **Data Initialization** button on the Device Setup screen.

3 While in Data Initialization screen, press the **Bluetooth Initialization** button.

4 Press the **Yes** button on the notification window to initialized the Bluetooth settings.
4. REAR VIEW CAMERA

About Rear View Camera
For user safety, this device is connected to a rear view camera which activates when driving in reverse. Even if the power of the device has been turned off, changing the gear to Reverse (R) will automatically turn on and activate the rear view camera. Changing to a different gear will turn off the power and deactivate the rear view camera.

1. Place the gear in Reverse (R).

2. The rear view camera mode will activate.

⚠️ WARNING!
The rear view camera is equipped with an optical lens necessary to acquire a wider field of vision and may result in displaying a distance different from the actual distance. Always check the rear and left/right direction when driving in reverse.
5. APPENDIX

Important information

- **Bluetooth**
  - Frequency Range: 2402 ~ 2480MHz
  - Bluetooth standard: 2.0
  - Profile: Headset(1.0), Hands-free(1.5), A2DP(1.0), AVRCP(1.0)
  - Transmission output: 0.02mW
  - Radio Emission: F1D
  - No. of channels: 79 channels
  - Operating temperature: -20 °C ~ +65 °C

⚠️ **CAUTION!**

The wireless device may be the cause of radio interference.
The manufacturer and installation provider will not be responsible to provide services related to human safety.

- **Common**
  - Name: Car TFT LCD Display AVN Unit
  - Power supply: DC 14.4V
  - Operation Power: DC 10V ~ DC 16V
  - Voltage: 2.5A
  - Dark current: 4mA (Head Unit Only)
  - Operating temperature range: -20 °C ~ +65 °C
  - Storage temperature: -30 °C ~ +75 °C
  - Dimensions: 217.2mm(W) × 113.2mm(H) × 204.3mm(D)
  - Weight: 3.1kg
## Troubleshooting guide

### Before thinking the product has malfunctioned

1. Errors which occur during the operation or installation of the device may be mistaken as a malfunction of the actual device.
2. If you are having problems with the device, try the suggestions listed below.
3. If the problems persist, contact your point of sale or the nearest service centre.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are small red, blue, or green dots on the screen.</td>
<td>• Because the LCD is manufactured with technology requiring high point density, a pixel deficiency or lighting may occur within 0.01% of total pixels.</td>
</tr>
</tbody>
</table>
| The sound or image is not working.           | • Has the Switch for the vehicle been turned to [ACC] or [ON]?  
• Has the SYSTEM been turned OFF? |
| The video is being displayed but the sound is not working. | • Has the volume been set to a low level?  
• Has the volume been set on mute? |
| When the power is turned on, the corners of the screen are dark. | • The display looking somewhat darker after prolonged periods of use is a normal phenomenon with LCD panels. It is not a malfunction.  
• If the screen is very dark, contact your point of sale or the nearest after service centre. |
| Sound is working from only one speaker.      | • Is the position of FAL/BAL sound controls or volume adjusted to only side?                                                            |
| Sound and video does not work in AUX mode.   | • Is the audio and video connector jacks fully inserted into the AUX terminal?                                                            |
| The external device is not working.          | • Is the external device connected with a standard connector cable?  |
### Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power does not switch on.</td>
<td>The fuse is disconnected.</td>
<td>Replace with a suitable fuse. If the fuse is disconnected again, please contact your point of sale or service centre.</td>
</tr>
<tr>
<td></td>
<td>Device is not properly connected.</td>
<td>Check to see that the device has been properly connected.</td>
</tr>
<tr>
<td>The DVD does not play.</td>
<td>The DISC has not been inserted or has been inserted upside down.</td>
<td>Insert the disc properly so that the sides are facing the correct direction.</td>
</tr>
<tr>
<td></td>
<td>The DISC has been contaminated.</td>
<td>Wipe clean dirt and other foreign substances from the DISC.</td>
</tr>
<tr>
<td></td>
<td>The vehicle battery is low.</td>
<td>Charge the battery. If the problem persists, please contact your point of sale or service centre.</td>
</tr>
<tr>
<td></td>
<td>A disc which is not supported by the device has been inserted.</td>
<td>Insert a disc which is supported for play by the device.</td>
</tr>
<tr>
<td></td>
<td>A disc which has a region code not supported by the device has been inserted.</td>
<td>The region code for the device is code &quot;1&quot;. Use a DVD which has the region code of &quot;1&quot; or &quot;ALL&quot;.</td>
</tr>
<tr>
<td></td>
<td>The DVD cannot be played because the parental guidance level is operating.</td>
<td>Check the parental guidance level in the initial setup screen.</td>
</tr>
<tr>
<td>The image colour or tone quality is low.</td>
<td>The brightness, saturation, hue, and contrast levels are not properly set.</td>
<td>Adjust the brightness, saturation, hue, and contrast levels through the display setting.</td>
</tr>
<tr>
<td>The video does not work.</td>
<td>• The brightness level has been set to the lowest level.</td>
<td>Adjust the brightness to a higher level.</td>
</tr>
<tr>
<td></td>
<td>• The device is not properly connected.</td>
<td>Check to see that the device has been properly connected.</td>
</tr>
<tr>
<td>Problem</td>
<td>Possible Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The sound does not work.</td>
<td>• The volume level is set at the lowest level.</td>
<td>• Adjust the volume level.</td>
</tr>
<tr>
<td></td>
<td>• The connector is not properly connected.</td>
<td>• Check the connection state.</td>
</tr>
<tr>
<td></td>
<td>• The device is currently fast-forwarding, rewinding, scanning, or playing in slow mode.</td>
<td>• The sound will not work when the device is fast-forwarding, rewinding, scanning, or playing in slow mode.</td>
</tr>
<tr>
<td>The sound or video quality is low.</td>
<td>• The DISC is dirty or scratched.</td>
<td>• Wipe off water or dirt from the DISC. Do not use a disc which has been scratched.</td>
</tr>
<tr>
<td></td>
<td>• Vibration is occurring from the position in which the conversion switch has been installed.</td>
<td>• The sound may be short-circuited and the image distorted if the device begins to vibrate. The device will return to normal operation once the vibration has stopped.</td>
</tr>
<tr>
<td></td>
<td>• The color and tone quality of the image is low.</td>
<td>• Aging of the video display and deterioration in performance may cause certain degradations in quality.</td>
</tr>
<tr>
<td>Subtitles do not work.</td>
<td>• Subtitles are not included in the current playing DVD.</td>
<td>• The subtitles cannot be played.</td>
</tr>
<tr>
<td></td>
<td>• The subtitle language has been set to &quot;OFF&quot;.</td>
<td>• Set the subtitle language on the desired language.</td>
</tr>
<tr>
<td>Subtitles do not turn off.</td>
<td>• The DVD currently being played has disabled the hide subtitle function.</td>
<td>• The subtitle cannot be turned off.</td>
</tr>
<tr>
<td>The sound or subtitle language does not change.</td>
<td>• Only one language is included in the current playing DVD.</td>
<td>• The language cannot be changed if the DISC does not support multi-languages.</td>
</tr>
<tr>
<td></td>
<td>• The current playing DVD only supports one language.</td>
<td>• The language cannot be changed.</td>
</tr>
<tr>
<td>The selected sound or subtitle language cannot be used.</td>
<td>• A language which is not supported by the current playing DVD has been selected.</td>
<td>• A language not supported by the DVD cannot be played.</td>
</tr>
<tr>
<td>Problem</td>
<td>Possible Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>The aspect ratio selected in the initial setting phase cannot be used.</td>
<td>An aspect ratio which is not supported by the DVD currently being played has been selected.</td>
<td>An aspect ratio not supported by the DVD cannot be played.</td>
</tr>
</tbody>
</table>
| The angle cannot be adjusted. | • The current playing DVD only supports one angle setting or only some of the DVD scenes support multi-angles.  
• The current playing DVD only supports one angle. | • The angle cannot be changed if the DISC does not support multi-angles or when playing a scene with only one angle.  
• The angle cannot be changed. |
| The USB does not work. | • USB memory is damaged.  
• USB memory has been contaminated.  
• A separately purchased USB HUB is being used.  
• A USB extension cable is being used.  
• A USB which is not a Metal Cover Type USB Memory is being used.  
• A HDD type, CF, SD Memory is being used.  
• There are no music files which can be played. | • Please use after formatting the USB into FAT 12/16/32 format.  
• Remove any foreign substances on the contact surface of the USB memory and multimedia terminal.  
• Directly connect the USB memory with the multimedia terminal in the vehicle.  
• Directly connect the USB memory with the multimedia terminal in the vehicle.  
• Use a standard USB Memory.  
• Use a standard USB Memory.  
• Only MP3, WMA file formats are supported. Please use only the supported music file formats. |
| The iPod is not recognized even though it has been connected. | • There are no titles which can be played.  
• The iPod firmware version has not been properly updated.  
• The iPod device does not recognize downloads. | • Use iTunes to download and save MP3 files into the iPod.  
• Use iTunes to update the firmware version and reconnect the iPod with the device.  
• Reset the iPod and reconnect with the device. |
### DVD region code and language code

#### Region code

<table>
<thead>
<tr>
<th>Region Code</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No Region Coding</td>
</tr>
<tr>
<td>1</td>
<td>United States of America, Canada</td>
</tr>
<tr>
<td>2</td>
<td>Europe, including France, Greece, Turkey, Egypt, Arabia, Middle East, Japan and South Africa</td>
</tr>
<tr>
<td>3</td>
<td>Korea, Thailand, Vietnam, Borneo and Indonesia</td>
</tr>
<tr>
<td>4</td>
<td>Australia and New Zealand, Mexico, the Caribbean, and South America</td>
</tr>
<tr>
<td>5</td>
<td>India, Africa, Russia and former USSR countries</td>
</tr>
<tr>
<td>6</td>
<td>Peoples Republic of China</td>
</tr>
<tr>
<td>7</td>
<td>Unused</td>
</tr>
<tr>
<td>8</td>
<td>Airlines/Cruise Ships</td>
</tr>
<tr>
<td>9</td>
<td>Expansion (often used as region free)</td>
</tr>
</tbody>
</table>

#### Language code

<table>
<thead>
<tr>
<th>Code</th>
<th>Country</th>
<th>Code</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>0101</td>
<td>Afar</td>
<td>0315</td>
<td>Corsican</td>
</tr>
<tr>
<td>0102</td>
<td>Abkhazian</td>
<td>0319</td>
<td>Czech</td>
</tr>
<tr>
<td>0106</td>
<td>Afrikaans</td>
<td>0325</td>
<td>Welsh</td>
</tr>
<tr>
<td>0113</td>
<td>Amharic</td>
<td>0401</td>
<td>Danish</td>
</tr>
<tr>
<td>0118</td>
<td>Arabic</td>
<td>0405</td>
<td>German</td>
</tr>
<tr>
<td>0119</td>
<td>Assamese</td>
<td>0426</td>
<td>Bihutani</td>
</tr>
<tr>
<td>0125</td>
<td>Aymara</td>
<td>0512</td>
<td>Greek</td>
</tr>
<tr>
<td>0126</td>
<td>Azerbaijani</td>
<td>0514</td>
<td>English</td>
</tr>
<tr>
<td>0201</td>
<td>Bashkir</td>
<td>0515</td>
<td>Esperanto</td>
</tr>
<tr>
<td>0205</td>
<td>Belarusian</td>
<td>0519</td>
<td>Spanish</td>
</tr>
<tr>
<td>0207</td>
<td>Bulgarian</td>
<td>0520</td>
<td>Estonian</td>
</tr>
<tr>
<td>0208</td>
<td>Bihari</td>
<td>0521</td>
<td>Basque</td>
</tr>
<tr>
<td>0209</td>
<td>Bislama</td>
<td>0601</td>
<td>Persian</td>
</tr>
<tr>
<td>0214</td>
<td>Bengali</td>
<td>0609</td>
<td>Finnish</td>
</tr>
<tr>
<td>0215</td>
<td>Tibetan</td>
<td>0610</td>
<td>Fijian</td>
</tr>
<tr>
<td>0218</td>
<td>Breton</td>
<td>0615</td>
<td>Faroese</td>
</tr>
<tr>
<td>0301</td>
<td>Catalan</td>
<td>061</td>
<td>French</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td>0625</td>
<td>Frisian</td>
<td>0923</td>
<td>Hebrew</td>
</tr>
<tr>
<td>0701</td>
<td>Irish</td>
<td>1009</td>
<td>Yiddish</td>
</tr>
<tr>
<td>0704</td>
<td>Scots</td>
<td>1001</td>
<td>Japanese</td>
</tr>
<tr>
<td>0712</td>
<td>Gallegan</td>
<td>1022</td>
<td>Javanese</td>
</tr>
<tr>
<td>0714</td>
<td>Guarani</td>
<td>1101</td>
<td>Georgian</td>
</tr>
<tr>
<td>0721</td>
<td>Gujarati</td>
<td>1111</td>
<td>Kazakh</td>
</tr>
<tr>
<td>0801</td>
<td>Hausa</td>
<td>1112</td>
<td>Greenlandic</td>
</tr>
<tr>
<td>0809</td>
<td>Hindi</td>
<td>1113</td>
<td>Cambodian</td>
</tr>
<tr>
<td>0818</td>
<td>Croatian</td>
<td>1114</td>
<td>Kannada</td>
</tr>
<tr>
<td>0821</td>
<td>Hungarian</td>
<td>1115</td>
<td>Korean</td>
</tr>
<tr>
<td>0825</td>
<td>Armenian</td>
<td>1119</td>
<td>Kashmiri</td>
</tr>
<tr>
<td>0901</td>
<td>Interlingua</td>
<td>1121</td>
<td>Kurdish</td>
</tr>
<tr>
<td>0905</td>
<td>Interlingue</td>
<td>1125</td>
<td>Kirghiz</td>
</tr>
<tr>
<td>0911</td>
<td>Inupiaq</td>
<td>1201</td>
<td>Latin</td>
</tr>
<tr>
<td>0914</td>
<td>Indonesian</td>
<td>1214</td>
<td>Lingala</td>
</tr>
<tr>
<td>0919</td>
<td>Icelandic</td>
<td>1215</td>
<td>Laotian</td>
</tr>
<tr>
<td>0920</td>
<td>Italian</td>
<td>1220</td>
<td>Lithuanian</td>
</tr>
</tbody>
</table>
DIGITAL NAVIGATION SYSTEM

HAVN-100HMCIS
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1. Warnings and Safety information

HAVN-100HMCIS Navigation is a navigation system that helps you find your way to your destination with its built-in GPS receiver. HAVN-100HMCIS Navigation does not transmit your GPS position; others cannot track you.

It is important that you look at the display only when it is safe to do so. If you are the driver of the vehicle, we recommend that you operate HAVN-100HMCIS Navigation before you start your journey. Plan the route before your departure and stop if you need to change something in the route.

You must obey the traffic signs and follow the road geometry. If you deviate from the route that HAVN-100HMCIS Navigation recommended, HAVN-100HMCIS Navigation changes the instructions accordingly.

For more information, consult the End User Licence Agreement.
HAVN-100HMCIS Navigation is optimised for in-car use. You can use it easily by tapping the screen buttons and the map with your fingertips.

HAVN-100HMCIS Navigation can plan routes throughout the whole installed map set; you do not need to change maps or switch to a poorly detailed general map to navigate between map segments or countries.

### Tasks and Instructions

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a stylus</td>
<td>You do not need a stylus to use HAVN-100HMCIS Navigation. Tap the buttons and the map with your fingertips.</td>
</tr>
<tr>
<td>Double tapping the screen</td>
<td>You do not need to tap the screen twice for any action. With buttons and controls, a single tap is enough.</td>
</tr>
</tbody>
</table>
| Tapping and holding the screen| You do not need this to access the basic navigation functions. Tap and keep pressing the following buttons to reach extra functions:  
  - Tap and hold 🗺 or 🌋 on the Map screen to enter 3D View Settings mode where you can change the current view of the 3D map and the zoom/tilt levels of the map view presets.  
  - Tap and hold any of the Preset buttons in 3D View Settings: you can set or reset the zoom value of the button.  
  - Tap and hold any of the 💼, 📊, 🌌, 🌑, 🌒, 🌓 buttons on the Map screen or in 3D View Settings: you can rotate, tilt or scale the map continuously.  
  - Tap and hold 📧 on keyboard screens: you can delete all the entered characters quickly.  
  - Tap and hold any point of the map to move the map in that direction |
| Gestures (drag&drop)          | You do not need gestures to access the basic navigation features. You can drag and drop the screen only for moving the handle on a slider (on list screens). |
2. Getting started with HAVN-100HMCIS Navigation

Start using HAVN-100HMCIS Navigation

When HAVN-100HMCIS Navigation is started the first time, you need to do the following:

- The End User License Agreement appears. Please, read it carefully. If you agree, tap Accept to continue.
- A warning message appears in British English. If you prefer a different language, do the following:
  - Tap Language. The list of available languages appear.
  - (optional) If your preferred language does not appear on the list, use the ↑ and ↓ buttons to move between Pages, or move the handle of the slider between the buttons.
  - Tap the list item with the name of the desired language, then tap to confirm the selection.
- Tap Accept to start using HAVN-100HMCIS Navigation.

After this, the Map screen appears and you can start using HAVN-100HMCIS Navigation. The typical way of using HAVN-100HMCIS Navigation is to select a destination, and start navigating. You can select your destination in the following ways:

- Use the selected location on the map (the Cursor) (page 2-17).
- Enter a full address or a part of an address, for example a street name without a house number or the names of two intersecting streets (page 2-17).
- Enter an address with postal code (Page 2-21). This way you do not need to select the name of the settlement and the search for street names might be faster as well.
- Use a coordinate (page 2-23)
- Use a saved location:
  - a Favourite (page 2-22)
  - the Home location
  - the Work location
  - a POI (page 2-22)
  - the History of previously set destinations and waypoints (page 2-23)

Hardware buttons

You can use HAVN-100HMCIS Navigation mostly by tapping the touch screen. The device has only a few hardware buttons. You can turn the system on or off at any time. When the system is switched off, HAVN-100HMCIS Navigation does not calculate your GPS position and it does not update the route or the driving instructions. When you turn the system on again, HAVN-100HMCIS Navigation continues navigating as soon as the GPS receiver has determined your position.
The functions of the hardware buttons are the following:

<table>
<thead>
<tr>
<th>Button</th>
<th>Action</th>
<th>Screen button equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adjusts the sound volume level</td>
<td></td>
</tr>
</tbody>
</table>
| 2      | Cycles through the following modes:  
• Daytime colours  
• Night colours  
• Screen turned off |  |
| 3      | Scales the map | and |
| 4      | Opens the Map screen.  
If the Map screen is open, moves the map back to the current GPS position. |  |
| 5      | Opens the Destination menu. |  |
| 6      | Opens the Route menu. |  |
| 7      | Opens the Setup menu. |  |

Buttons and other controls on the screen

When you are using HAVN-100HMCIS Navigation, you usually tap buttons on the touch screen. You only need to confirm selections or changes in HAVN-100HMCIS Navigation if the application needs to restart, it needs to perform a major reconfiguration, or you are about to lose some of your data or settings. Otherwise, HAVN-100HMCIS Navigation saves your selections and applies the new settings without confirmation as soon as you use the controls.
## 2. Getting started with HAVN-100HMCIS Navigation

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
<th>Description</th>
<th>How to use it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Button</td>
<td>![Info icon]</td>
<td>Tap it to initiate a function, to open a new screen, or to set a parameter.</td>
<td>Tap it once.</td>
</tr>
<tr>
<td>Icon</td>
<td>![Icon]</td>
<td>Shows status information.</td>
<td>Some icons also function as a button. Tap them once.</td>
</tr>
<tr>
<td>List</td>
<td>![List]</td>
<td>When you need to select from several options, they appear in a list.</td>
<td>Move between ages with the  and  buttons and tap the value that you want.</td>
</tr>
</tbody>
</table>
| Slider        | ![Slider] | When a feature has several different unnamed values, HAVN-100HMCIS Navigation shows an indicator on a gauge that displays and sets a value from a range. | • Drag the handle to move the slider to its new position.  
• Tap the slider where you want the handle to appear; the thumb jumps there. |
| Switch        | ![Switch] | When there are only two choices, a green lamp shows whether the feature is enabled. In addition, the whole switch turns blue when the feature is selected, and turns grey if the switch is turned off. | Tap it to turn the switch on or off. |
| Virtual keyboard | ![Virtual keyboard] | Alphabetic and alphanumeric keyboards to enter text and numbers.          | Each key is a touch screen button. |
■ Using keyboards

You only need to enter letters or numbers in HAVN-100HMCIS Navigation when you cannot avoid it.

You can type with your fingertips on the full-screen keyboards and you can switch between various keyboard layouts, for example ABC, QWERTY, or numerical.

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching to another keyboard layout, for example from an English QWERTY keyboard to a Greek keyboard</td>
<td>Tap Keys and select from the list of available keyboard types. HAVN-100HMCIS Navigation remembers your last keyboard choice and offers it the next time you need to enter data.</td>
</tr>
<tr>
<td>Correcting your entry on the keyboard</td>
<td>Remove the unneeded character(s): tap . Tap and hold the button to delete the entire input string.</td>
</tr>
<tr>
<td>Entering a space, for example between a first name and a family name or in multi-word street names</td>
<td>Tap .</td>
</tr>
<tr>
<td>Entering lowercase or capital letters</td>
<td>Tap to cycle through entering lowercase letters, initial capitals or all capitals.</td>
</tr>
<tr>
<td>Entering symbols</td>
<td>Tap to switch to a keyboard offering symbol characters.</td>
</tr>
<tr>
<td>Finalising the keyboard entry</td>
<td>Tap Done.</td>
</tr>
</tbody>
</table>

Using the map

The map screen is the most frequently used screen of HAVN-100HMCIS Navigation. It can be accessed by pressing the MAP VOICE hardware button.

For further information about the map screen, see Page 2-28.

■ Checking the details of a map location

- If you are interested in the details of your current position during navigation:
  - Check the bottom line of the map. It shows the current street and house number information.
  - For further details, tap to open the Cursor menu.
2. Getting started with HAVN-100HMCIS Navigation

- Tap Info. The address, the coordinate and the list of nearby POIs will be displayed.
- You can check the details of any other location by selecting it on the map:
- Tap the desired location on the map. The Cursor (○) appears there. The address of the location is displayed at the bottom of the map.
- For further details, tap Info to open the Cursor menu.
- Tap Info. The address, the coordinate and the list of nearby POIs will be displayed.
- It is even easier if you select the desired point in the Destination menu. Then the Cursor menu opens automatically. You only need to tap the Info button.

### Manipulating the map

Position markers on the map:
- Current GPS position: ○ (page 2-14)
- Selected location (Cursor): ○ (page 2-14)

The following controls help you modify the map view to best suit your actual needs. Most of these controls appear only if you tap and hold ○ or ○ to enter 3D View Settings mode.

<table>
<thead>
<tr>
<th>Action</th>
<th>Button(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving the map</td>
<td>No buttons</td>
<td>You can move the map into any direction: tap the map anywhere, and the selected point becomes the centre of the map view. Tap and hold the map, and the map moves continuously in that direction. If GPS position is available and you have moved the map, press the MAP VOICE hardware button to return to the GPS position.</td>
</tr>
<tr>
<td>Zooming in and out</td>
<td>○, ○</td>
<td>Changes how much of the map is displayed on the screen. HAVN-100HMCIS Navigation uses high-quality vector maps that let you see the map at various zoom levels, always with optimised content. It always displays street names and other text with the same font size, never upsidedown, and you only see the streets and objects that you need. Map scaling has different limits in 2D and in 3D map view modes.</td>
</tr>
<tr>
<td>Tilting up and down</td>
<td>○, ○</td>
<td>Changes the vertical view angle of the map in 3D mode.</td>
</tr>
<tr>
<td>Rotating left and right</td>
<td>○, ○</td>
<td>Changes the horizontal view angle of the map in 3D mode. When GPS position is available, HAVN-100HMCIS Navigation always rotates the map so its top faces your direction of travel (Track-Up orientation). You can turn away from Track-Up with these buttons.</td>
</tr>
</tbody>
</table>
### Action Button(s) Description

<table>
<thead>
<tr>
<th>Action</th>
<th>Button(s)</th>
<th>Description</th>
</tr>
</thead>
</table>
| Viewing modes                                                         | [ , , ]       | Gives you the following map perspectives in the HAVN-100HMCIS Navigation:  
- classic top-down view (2D)  
- perspective view (3D)                                                                                                                     |
| Returning to normal navigation (back to the GPS position with automatic map rotation) | **MAP VOICE** | Press this hardware button to move the map back to the current GPS position. If the map has been rotated in 3D mode, automatic map rotation is also re-enabled.                                                                                                                 |
| Tilt and zoom preset buttons                                          | [Preset 1, Preset 2, Preset 3] | Tap one of the preset buttons to set the tilt and zoom levels to fix, predefined values. Smart Zoom is disabled. These buttons are available in 3D View Settings mode. Tap&hold any of the buttons to set its value to the current tilt and zoom levels, or to reset it to its original value. |
| Map scale                                                             | ![Map Scale Icon] | The HAVN-100HMCIS Navigation shows the scale of the map.                                                                                                                                                                                                                           |
| Fit-to-screen                                                         | **Fit to Screen** | This button does not appear on the Map screen. It is available on the Route Information screen: When you have an active route, you can display it in its full length on the map.                                                                                                        |

#### Status information and hidden controls on the map

When there is an active route, the type and distance of the next route event appears in the top left corner, in the Turn Preview field. Tap this area to open the Route Information screen with useful route information.

Examples of route even type symbols:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔂</td>
<td>Turn left.</td>
</tr>
<tr>
<td>🔽</td>
<td>Turn right.</td>
</tr>
<tr>
<td>🔼</td>
<td>Turn back.</td>
</tr>
<tr>
<td>🔽</td>
<td>Bear left.</td>
</tr>
<tr>
<td>🔼</td>
<td>Bear right.</td>
</tr>
<tr>
<td>🔃</td>
<td>Turn sharp left.</td>
</tr>
<tr>
<td>🔍</td>
<td>Turn sharp right.</td>
</tr>
<tr>
<td>🔽</td>
<td>Keep left.</td>
</tr>
<tr>
<td>🔼</td>
<td>Keep right.</td>
</tr>
<tr>
<td>🔽</td>
<td>Keep left in fork.</td>
</tr>
<tr>
<td>🔼</td>
<td>Keep right in fork.</td>
</tr>
</tbody>
</table>

Getting started with HAVN-100HMCIS Navigation 2-11
2. Getting started with HAVN-100HMCIS Navigation

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🚗</td>
<td>Continue straight in the intersection.</td>
</tr>
<tr>
<td>⛑</td>
<td>Enter roundabout.</td>
</tr>
<tr>
<td>🛣</td>
<td>Enter motorway.</td>
</tr>
<tr>
<td>🛣</td>
<td>Exit motorway.</td>
</tr>
<tr>
<td>⛑</td>
<td>Board ferry.</td>
</tr>
<tr>
<td>⛑</td>
<td>Leave ferry.</td>
</tr>
<tr>
<td>📢</td>
<td>Approaching the next via point.</td>
</tr>
<tr>
<td>📢</td>
<td>Approaching the destination.</td>
</tr>
</tbody>
</table>

The following information can be seen in the three data fields shown on the map screen. Tap this area to open the Trip Information screen where you can select which values to be shown in these three fields. When there is no active route, these fields show the following information: current speed, compass and the current time of day.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Type</th>
<th>More information</th>
</tr>
</thead>
<tbody>
<tr>
<td>🕒</td>
<td>Time information</td>
<td>Current GPS time</td>
</tr>
<tr>
<td>🌐</td>
<td>Distance Information</td>
<td>Distance remaining to reach the destination</td>
</tr>
<tr>
<td>🕒</td>
<td>Arrival Time Information</td>
<td>Estimated arrival time at the destination</td>
</tr>
</tbody>
</table>
If you have enabled **Highway Drive Mode** in Map Settings, additional information may appear on the left:

If you have enabled **Intersection Zoom** in Map Settings, when approaching a route event, a top down view of the intersection appears on the left:

### Using the Cursor (the selected map location)
First, place the Cursor at the desired map location with one of the following options:

- Use the Find menu to select a location. The map returns with the selected point (the Cursor) in the middle, and the Cursor menu appears with the available options.
- Tap the map to place the Cursor at the desired location. Now tap ![Cursor](cursor.png) to open the Cursor menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="set_as_destination.png" alt="Set as Destination" /></td>
<td>In the active route, uses the Cursor as the destination by replacing the previous destination</td>
</tr>
<tr>
<td><img src="insert_waypoint.png" alt="Insert Waypoint" /></td>
<td>In the active route, uses the Cursor as a via point (an intermediate destination) preceding the destination</td>
</tr>
<tr>
<td><img src="continue.png" alt="Continue" /></td>
<td>In the active route, uses the Cursor as the destination while keeping the previous destination as a via point</td>
</tr>
<tr>
<td><img src="save_as.poi.png" alt="Save as POI" /></td>
<td>Saves the Cursor as a POI</td>
</tr>
<tr>
<td><img src="add_to_favourites.png" alt="Add to Favourites" /></td>
<td>Saves the Cursor as a Favourite location</td>
</tr>
<tr>
<td><img src="info.png" alt="Info" /></td>
<td>Opens a screen with the name, address and coordinate information of the Cursor, and the list of POIs near it</td>
</tr>
</tbody>
</table>
2. Getting started with HAVN-100HMCIS Navigation

HAVN-100HMCIS Navigation concepts

- **Smart Zoom**
  Smart Zoom is a lot more than just a usual automatic zoom feature:
  - **While following a route calculated by HAVN-100HMCIS Navigation:** when approaching a turn, it will zoom in and raise the view angle to let you easily recognise your manoeuvre at the next junction. If the next turn is at a distance, it will zoom out and lower the view angle to be flat so you can see the road in front of you.
  - **While driving without an active route in HAVN-100HMCIS Navigation:** Smart Zoom will zoom in if you drive slowly and zoom out when you drive at high speed.

- **Position markers**
  - **Current GPS position and Lock-on-Road**
    When your GPS position is available, HAVN-100HMCIS Navigation marks your current position with the icon on the map. The icon is aligned to the nearest road to suppress GPS position errors.

To use the current GPS position, tap . The Cursor menu appears and you can save the GPS position as one of the following:
- a Favourite
- a POI

- **When GPS position is available, and you have moved the map (the icon is moving or is not even visible), or you have rotated the map in 3D mode, press the **MAP VOICE** hardware button to move the map back to the GPS position and re-enable Track-up map orientation (automatic map rotation).

**Note!**

Even if you move the map while you are driving, HAVN-100HMCIS Navigation continues navigating if there is an active route: it plays the voice instructions and displays the turn preview icons according to your current GPS position.

- **Selected location (Cursor)**
  If you select a location in the Find menu, or you tap the map, the Cursor appears at the selected point on the map. HAVN-100HMCIS Navigation displays the Cursor with a radiating red dot ( ) to make it visible at all zoom levels.
  When the Cursor is set, tap . The Cursor menu appears and you can use the Cursor as one of the following:
  - a via point in a route
  - the destination of a route
  You can also search for POIs around the Cursor.
  Or you can save the location of the Cursor as:
  - a Favourite
  - a POI
Getting started with HAVN-100HMCIS Navigation

■ Daytime and night colour schemes
HAVN-100HMCIS Navigation uses different colour schemes during the day and during the night.
● Daytime colours are similar to paper road maps.
● The night colour schemes use dark colours for large objects to keep the average brightness of the screen low.

HAVN-100HMCIS Navigation offers different daytime and night colour schemes. To manually switch between the daytime and night colour schemes, press the DARK hardware button.

■ Colour scheme in tunnels
When entering a tunnel, the colours of the map change. All buildings disappear, the large objects (such as surface waters or forests) and the empty areas between roads become black. However roads and streets keep their original colours from the daytime or night colour scheme currently used. After leaving the tunnel, the original colours return.

■ Route calculation and recalculation
HAVN-100HMCIS Navigation calculates the route based on your preferences:
● Route calculation method:
   ● Fast
   ● Short
   ● Economical
   ● Easy
● Road types
   ● Unpaved Roads
   ● Permit Needed
   ● Toll Roads
   ● Charge Roads
   ● Ferries
   ● Highways
   ● U-turns
HAVN-100HMCIS Navigation automatically recalculates the route if you deviate from the proposed itinerary. For further information about Route Planning options, see page 2-44.

■ Itinerary
The Itinerary is the list of the route events, that is, the driving instructions.

You have the following options on the Itinerary screen:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any of the list items</td>
<td>Opens the map with the selected manoeuvre in the middle.</td>
</tr>
<tr>
<td>Default</td>
<td>Changes the detail level of the Itinerary: only significant intersections (the ones announced in voice guidance) are listed</td>
</tr>
<tr>
<td>Detail</td>
<td>Changes the detail level of the Itinerary: all intersections are listed</td>
</tr>
</tbody>
</table>

Getting started with HAVN-100HMCIS Navigation  2-15
2. Getting started with HAVN-100HMCIS Navigation

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road List</td>
<td>Changes the detail level of the Itinerary: the list of the roads used while navigating the route.</td>
</tr>
<tr>
<td>↑, ↓</td>
<td>Moves between Pages for additional list items.</td>
</tr>
</tbody>
</table>

When the map is open with a manoeuvre in the middle:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zooms in the map.</td>
</tr>
<tr>
<td></td>
<td>Zooms out the map.</td>
</tr>
<tr>
<td>↑, ↓</td>
<td>Moves the map to show the previous or next manoeuvre.</td>
</tr>
<tr>
<td></td>
<td>Opens a screen where you can avoid a part of the route starting from the selected manoeuvre.</td>
</tr>
</tbody>
</table>

- Route demonstration

A simulation drives you through the route at normal driving speed, following the driving instructions (page 2-26).
You can use it, for example, to see which bridge HAVN-100HMCIS Navigation planned for the route; if you do not want to take that bridge, you can avoid it.

To start route demonstration press the ROUTE hardware button, and then tap Simulate.

- POI (Points of Interest)

A point of interest (POI) is a location that someone might find useful or interesting. The HAVN-100HMCIS Navigation is delivered with thousands of POIs and you can also create your own POIs in the application.
POIs are grouped into several levels of categories and subcategories. The icon of a POI that comes with the map shows the symbol of the POI category. If you save your own POI, you can select an icon for it independently of the POI category you have put it in.

Saving POIs
To save a POI, place the Cursor ( ) at the desired location, then tap the following buttons: Save as POI.

- Speed limit warning

Maps sometimes contain information about the speed limits of the road segments. This information may not be available for your region (ask your local dealer) or may not be fully correct for all roads on the map.
You can configure HAVN-100HMCIS Navigation to warn you if you exceed the current limit. Press the SETUP hardware button, then tap the following buttons: Warn When Speeding.

When you exceed the speed limit, the following happens:
- Visible Warning: A symbol with the speed limit appears in the corner of the map (for example: 60).
- Audible Warning: A voice message is played using the selected voice guidance profile.
You can set up your route in HAVN-100HMCIS Navigation in several ways:
- if you need a simple route (a route with only one destination, without any intermediate via points), you can select the destination and start navigating to it right away
- you can plan a multi-point route

**Selecting the destination of a route**
HAVN-100HMCIS Navigation offers you several ways of choosing your destination and via points (intermediate destinations):
- Use the selected location on the map (the Cursor) (page 2-17).
- Enter a full address or a part of an address, for example a street name without a house number or the names of two intersecting streets (page 2-17).
- Enter an address with postal code (page 2-21). This way you do not need to select the name of the settlement and the search for street names might be faster as well.
- Use a coordinate (page 2-23)
- Use a saved location:
  - a Favourite (page 2-22)
  - the Home location
  - the Work location
  - a POI (page 2-22)
  - the History of previously set destinations and waypoints (page 2-23)

**INFORMATION!**
If you are going to use a route later, save it before you start navigating. Press the **ROUTE** hardware button, then tap the following buttons: **Edit Route**, **Save Route**.

**Selecting the Cursor as the destination**
- Locate your destination on the map: move and scale the map as needed (page 2-10).
- Tap the location that you want to select as your destination. The Cursor (Cursor) appears.
- Tap (Cursor) to open the Cursor menu.
- The map appears with the selected point in the middle. Tap **Set as Destination** from the Cursor menu. The route is then automatically calculated, and you can start navigating.

**INFORMATION!**
If you know that you will use a destination later, when the Cursor menu appears, save it as a POI, or put it on the list of your Favourites first.

**Entering an address or part of an address**
If you know at least a part of the address, it is the quickest way to select the destination of the route.
Using the same screen, you can find an address by entering:
- the exact address, including house number
- the centre of a settlement
- an intersection
- the midpoint of a street
- any of the above, starting the search with the postal code (page 2-21)

(a) **Entering an address (United Arab Emirates)**
In some countries, states are not used in addressing. After selecting the country, the next step is to define the settlement. There are four lines on the screen:
3. Navigating with HAVN-100HMCIS Navigation

Press the SETUP hardware button.

By default, HAVN-100HMCIS Navigation proposes the country and settlement where you are. If needed, tap the button with the name of the country, and select a different one from the list.

If needed, change the settlement:

- Select the settlement from the list of recently used ones, tap the <City Name> button.
- Enter a new settlement:
  - Tap the button with the name of the settlement, or if you have changed the country/state, tap <City Name>.
  - Enter the settlement name on the keyboard.
  - Tap Done to get the list of results.
  - Pick the street from the list.

Enter the house number:

- Tap <House Number>.
- Enter the house number on the keyboard.
- Tap Done to finish entering the address.

The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

(b) Entering an address (Saudi Arabia)

In some countries, the state is also used in addresses. If you are in one of these countries, or choose any of them from the list of countries, the country and the state appears on the first button:

1. Press the DEST hardware button.
2. Tap Address.

By default, HAVN-100HMCIS Navigation proposes the country, state and settlement where you are. If needed, tap the button with the name of the country, and select a different one from the list. If you select a new country, you also need to select the state, or tap <All states> to search for a settlement regardless of the state it is in.
If needed, change the settlement:
- To select the settlement from the list of recently used ones, tap the button.
- To enter a new settlement:
  (a) Tap the button with the name of the settlement, or if you have changed the country/state, tap <City/Town Name>.
  (b) Start entering the settlement name on the keyboard.
  (c) Get to the list of search results:
      - After entering a couple of characters, the names that match the string appear in a list.
      - Tap Done to open the list of results before it appears automatically.
  (d) Pick the settlement from the list.

Enter the street name:
(a) Tap <Street Name>.
(b) Start entering the street name on the keyboard.
(c) Get to the list of results:
    - After entering a couple of characters, the names that match the string appear in a list.
    - Tap Done to open the list of results before it appears automatically.
(d) Pick the street from the list.

Enter the house number:
(a) Tap <House Number>.
(b) Enter the house number on the keyboard.
(c) Tap Done to finish entering the address.

The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

(c) Entering an address if house numbering is restarted
There are long roads where house numbering is restarted at some point. This way the same house number can appear twice or even more times on the same road. If this is the case, after entering the house number, you need to select the appropriate address by the district/suburb information.

Press the DEST hardware button.
2 Tap Address.

By default, HAVN-100HMCIS Navigation proposes the country/state and settlement where you are. If needed, tap the button with the name of the country/state, and select a different one from the list.

3 If needed, change the settlement:
- To select the settlement from the list of recently used ones, tap the button.
- To enter a new settlement:
  (a) Tap the button with the name of the settlement, or if you have changed the country/state, tap <City Name>.
  (b) Start entering the settlement name on the keyboard.
  (c) Get to the list of search results:
      - After entering a couple of characters, the names that match the string appear in a list.
      - Tap Done to open the list of results before it appears automatically.
  (d) Pick the settlement from the list.

Enter the street name:
(a) Tap <Street Name>.
(b) Start entering the street name on the keyboard.
(c) Get to the list of results:
    - After entering a couple of characters, the names that match the string appear in a list.
    - Tap Done to open the list of results before it appears automatically.
3. Navigating with HAVN-100HMCIS Navigation

If needed, change the settlement:
- To select the settlement from the list of recently used ones, tap the <City Name> button.
- To enter a new settlement:
  (a) Tap the button with the name of the settlement, or if you have changed the country/state, tap the <City Name> button.
  (b) Start entering the settlement name on the keyboard.
  (c) Get to the list of search results:
     - After entering a couple of characters, the names that match the string appear in a list.
     - Tap Done to open the list of results before it appears automatically.
  (d) Pick the settlement from the list.

(d) Selecting an intersection as the destination
1 Press the DEST hardware button.
2 Tap Address.
   By default, HAVN-100HMCIS Navigation proposes the country/state and settlement where you are. If needed, tap the button with the name of the country/state, and select a different one from the list.

(d) Pick the street from the list.
3 Tap the Interesion button.
   If only a few intersecting streets exist, their list appears immediately.
   In case of a longer street, a keyboard screen appears. Start entering the name of the intersecting street on the keyboard. As you type, if the matching streets can be shown on one screen, their list appears automatically.
4 Tap the desired intersecting street in the list.
   The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

(e) Selecting a city centre as the destination
The City Centre is not the geometric centre of the settlement but an arbitrary point the map creators have chosen. In towns and villages, it is usually the most important intersection; in larger cities, it is an important intersection.
1 Press the DEST hardware button.
2 Tap Address.
   By default, HAVN-100HMCIS Navigation
proposes the country/state and settlement where you are. If needed, tap the button with the name of the country/state, and select a different one from the list.

If needed, change the settlement:
- To select the settlement from the list of recently used ones, tap the button.
- To enter a new settlement:
  1. Tap the button with the name of the settlement, or if you have changed the country/state, tap <City Name>.
  2. Start entering the settlement name on the keyboard.
  3. Get to the list of search results:
     - After entering a couple of characters, the names that match the string appear in a list.
     - Tap Done to open the list of results before it appears automatically.
  4. Pick the settlement from the list.
  5. Tap the City Centre button.
  6. The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

(f) Entering an address with a postal code
All of the above address searching possibilities can be performed with entering the postal code instead of the settlement name. Find below an example with a full address:

1. Press the DEST hardware button.
2. Tap Address.
   - Enter the postal code on the keyboard.
   - Get to the list of results:
     - After entering a couple of numbers, matching results appear in a list.
     - Tap Done to open the list of results before it appears automatically.
   - Pick the settlement from the list.
   - Enter the street name:
     - Tap <Street Name>.
     - Start entering the street name on the keyboard.
     - Get to the list of results:
       - After entering a couple of characters, the names that match the string appear in a list.
       - Tap Done to open the list of results before it appears automatically.
     - Pick the street from the list.
   - Enter the house number:
     - Tap <House Number>.
     - Enter the house number on the keyboard.
     - Tap Done to finish entering the address.

(b) Start entering the street name on the keyboard.
(c) Get to the list of results:
   - After entering a couple of characters, the names that match the string appear in a list.
   - Tap Done to open the list of results before it appears automatically.

(d) Pick the street from the list.

(g) Tips on entering addresses quickly
- When you are entering the name of a settlement or a street, HAVN-100HMCIS Navigation only displays those characters that appear in possible search results. The other characters are greyed out.
3. Navigating with HAVN-100HMCIS Navigation

- When entering the settlement name or the street name, tap the button after a couple of letters; HAVN-100HMCIS Navigation lists the items that contain the specified letters.
- You can speed up finding an intersection:
  - Search first for the street with a less common or less usual name; fewer letters are enough to find it.
  - If one of the streets is shorter, search for that one first. You can then find the second one faster.
- You can search for both the type and the name of a road. If the same word appears in several names, for example in the name of streets, roads and avenues, you can obtain the result faster if you enter the first letter of the street type: For example, enter Pi A to obtain Pine Avenue and skip all Pine Streets and Pickwick Roads.
- You can also search in postal codes. This is useful when a street name is common and it is used in several districts of a city.

### Selecting the destination from your Favourites

You can select a location that you have already saved as a Favourite to be your destination.

- Press the DEST hardware button.
- Tap Favourites. Tap the Favourite that you want to set as your destination.
- The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

### Selecting Home or Work as the destination

The first (Home) and the second (Work) Favourite can be accessed directly. You need to save a location for a Favourite before you can use it.

- Press the DEST hardware button.
- Tap Home or tap Work.
- The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

### Selecting the destination from the POIs

You can select your destination from the POIs included with HAVN-100HMCIS Navigation or from the ones you have previously created.

- Press the DEST hardware button.
- Tap POI.
- Select the area around which the POI should be searched for:
  - Around Address: The POI will be searched for around a given address.
  - Around Cursor: The map appears with the Cursor in the middle. Modify the location of the Cursor if necessary, then tap OK. The POI will be searched for around the given location.
  - Around GPS Position: The POI will be searched for around the current GPS position.
  - Around Destination: The POI will be searched for around the destination of the active route.
  - Along Route: The POI will be searched for not around a given point, but by the size of the detour it means from the active route.
This can be useful if you search for a later stopover that causes only a minimal detour, for example upcoming petrol stations or restaurants.

- You can narrow the search with the following:
  - Select the POI group (e.g. Accommodation), and after that, if needed, select the POI subgroup (e.g. Hotel or Motel).
  - To find the POI by its name, tap Search, and use the keyboard to enter a part of the name.
  - To list all POIs in a given POI group, Tap Search, Done.
  - [optional] When finally the list of results appear, you can sort the list:
    - Order by Name: sort the list alphabetically
    - Order by Distance: sort the list by the distance from your current position in a straight line (available when you search around a single location)
    - By Detour: sort the list by the size of the needed detour (available when you search along the active route)
    - Tap the desired POI in the list.

- The map appears with the selected point in the middle.
- Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

### Selecting the destination with saved POI search criteria

POI search criteria can be saved in the POI section of the Manage menu, but HAVN-100HMCIS Navigation is already shipped with some saved criteria you can use instantly when searching for a POI.

- Press the DEST hardware button.
- Tap POI.
- Tap Saved Search Criteria.
- Select one of the saved criteria, and the list of matching POIs appears.
- Tap the desired POI in the list.
- The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

### Selecting the destination from the History

The destinations that you have set earlier appear in the History.

- Press the DEST hardware button.
- Tap Favourites.
- If necessary, move between Pages with to see earlier destinations.
- Tap the desired item.
- The map appears with the selected point in the middle. Tap Set as Destination from the Cursor menu. The route is then automatically calculated, and you can start navigating.

### Selecting the destination by entering its coordinates

- Tap the following buttons: Address, Coordinate.
- Press the DEST hardware button.
- Tap Coordinate.
- [optional] Tap Coordinate Display Format to change the format of the displayed coordinates.
- Tap the latitude or longitude value to change the coordinates.
- Enter the coordinate values in WGS84 format on the keyboard: the latitude (N or S) and the longitude (E or W).
3. Navigating with HAVN-100HMCIS Navigation

- Tap **Done**.
- The map appears with the selected point in the middle. Tap **Set as Destination** from the Cursor menu. The route is then automatically calculated, and you can start navigating.

### Creating a multi-point route (inserting a via point)

Multi-point routes are created from simple routes, so a route must be active first. One of the ways of expanding the route is to keep the destination, and to add via points (intermediate destinations).

- Select a new location as you did in the previous sections. This will be the additional destination in the route.
- The map appears with the selected point in the middle, and the Cursor menu opens automatically.
- Tap **Insert Waypoint** to add the point as an intermediate destination preceding the final destination of the route.
- [optional] To add more points to the route, repeat the above steps as many times as you like.

If you insert a via point in a route that is already a multi-point route, you will automatically be taken to the Edit Route screen where you can determine the position of the intermediate route point. When you enter the screen, the new via point is placed as the last via point before the final destination. The new point is the selected point in the list.

You have the following options:

<table>
<thead>
<tr>
<th>Button</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="/images/up.png" alt="Up" /></td>
<td>The selected point moves up in the list (becomes a via point to be reached earlier). Tap this button repeatedly, and the point becomes the start point of the route.</td>
</tr>
<tr>
<td><img src="/images/down.png" alt="Down" /></td>
<td>The selected point moves down in the list (becomes a via point to be reached later). Tap this button repeatedly, and the point becomes the final destination of the route.</td>
</tr>
<tr>
<td><img src="/images/recycle.png" alt="Recycle" /></td>
<td>The route is reversed. The start point becomes the destination, the destination becomes the start point, and all via points are to be reached in the opposite order than before.</td>
</tr>
<tr>
<td>Remove</td>
<td>The selected point is removed from the route.</td>
</tr>
<tr>
<td>Optimise</td>
<td>The route is optimised. The start point and the destination remain at their position, but the via points are reordered to make the shortest possible route.</td>
</tr>
<tr>
<td>Load Route</td>
<td>Tap this button to replace the active route with a previously saved route.</td>
</tr>
<tr>
<td>Save Route</td>
<td>Tap this button to save this route for later use.</td>
</tr>
</tbody>
</table>

Every time a new point is added, the route is recalculated automatically, and you can start navigating right away.
Creating a multi-point route (appending a new destination)

Multi-point routes are created from simple routes, so a route must be active first. One of the ways of expanding the route is to add a new destination. The previous destination becomes the last via point of the route.

- Select a new location as you did in the previous sections. This will be the additional destination in the route.
- The map appears with the selected point in the middle, and the Cursor menu opens automatically.
- Tap **[Continue]** to add the point as a new final destination demoting the previous one to the last intermediate destination.
- [optional] To add more points to the route, repeat the above steps as many times as you like.

Every time a new point is added, the route is recalculated automatically, and you can start navigating right away.

---

**Editing the route**

Press the **ROUTE** hardware button, and then tap **Edit Route**.

The list of route points appear with the start point at the top of the list and the final destination at the bottom. If several via points exist, you might need to scroll between Pages.

Tap one of the route points in the list. You have the following options:

<table>
<thead>
<tr>
<th>Button</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Up Arrow]</td>
<td>The selected point moves up in the list (becomes a via point to be reached earlier). Tap this button repeatedly, and the point becomes the start point of the route.</td>
</tr>
<tr>
<td>![Down Arrow]</td>
<td>The selected point moves down in the list (becomes a via point to be reached later). Tap this button repeatedly, and the point becomes the final destination of the route.</td>
</tr>
<tr>
<td>![Refresh]</td>
<td>The route is reversed. The start point becomes the destination, the destination becomes the start point, and all via points are to be reached in the opposite order than before.</td>
</tr>
<tr>
<td>![Optimise]</td>
<td>The route is optimised. The start point and the destination remain at their position, but the via points are reordered to make the shortest possible route.</td>
</tr>
<tr>
<td>![Remove]</td>
<td>The selected point is removed from the route.</td>
</tr>
<tr>
<td>![Load Route]</td>
<td>Tap this button to replace the active route with a previously saved route.</td>
</tr>
<tr>
<td>![Save Route]</td>
<td>Tap this button to save this route for later use.</td>
</tr>
</tbody>
</table>

As soon as you leave this screen, the route is recalculated automatically, and you can start navigating right away.
3. Navigating with HAVN-100HMCIS Navigation

**Viewing the entire route on the map (Fit-to-Screen)**
The map can be moved and scaled to show the whole line of the route. You do not need to manipulate the map manually. The Fit-to-Screen feature does it for you.
Press the [ROUTE] hardware button, then tap the following buttons: Route Info, Fit to Screen.

**Watching the simulation of the route**
You can start a route simulation at normal speed and with voice guidance instructions announced. This option is for demonstration purposes, or for checking difficult parts of the route in advance.
• Press the [ROUTE] hardware button.
• Tap Simulate.
• The simulation can be aborted any time by tapping Stop.

**Pausing the active route**
You do not need to pause the active route: when you start driving again, HAVN-100HMCIS Navigation restarts the voice instructions from your position.

**Deleting the next via point from the route**
The easiest way to delete the upcoming route point (the next via point) is to open the Route Information screen by pressing the [ROUTE] hardware button, and then tapping Skip Next Via.

**Deleting the active route**
You can delete the active route by pressing the [ROUTE] hardware button, and then tapping Remove Route.

**Saving a route**
• Press the [ROUTE] hardware button.
• Tap the following buttons: Edit Route, Save Route.
• Enter a name for the saved route, and then tap Done.
When you save a route, HAVN-100HMCIS Navigation not only saves the route points but the whole itinerary:
• If you updated your map since you first saved the route, HAVN-100HMCIS Navigation recognises the change, and recalculates the driving instructions according to the latest available map information.
• HAVN-100HMCIS Navigation deletes from the route any via points that you already left behind during navigation together with the road segments used to reach it. To avoid this, if you want to save the route, you need to save it before you start navigating.
Loading a saved route

- Press the **ROUTE** hardware button.
- Tap the following buttons: **Edit Route**, **Load Route**.
- Tap the route you wish to navigate.
- In the very likely case when the start position of the saved route is different from the current GPS position, the start point will be replaced with your current GPS position.
- The map appears, and you can start navigating.
4. Reference Guide

On the following Pages you will find the description of the Map screen and the different menu screens of HAVN-100HMCIS Navigation. These screens can be opened with hardware buttons.

Map screen

Press the MAP VOICE hardware button to open this screen.

HAVN-100HMCIS Navigation is primarily intended for land navigation. That is why maps in HAVN-100HMCIS Navigation look similar to paper road maps. However, HAVN-100HMCIS Navigation provides much more than regular paper maps: you can customise the look and the content of the map.

The most important and most often used screen of HAVN-100HMCIS Navigation is the Map screen.

During navigation, the screen shows route information and trip data (left screenshot), but when you tap and hold or , additional buttons and controls appear (right screenshot). Most parts of the screen behave as buttons.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Symbol" /></td>
<td>Turn Preview, that is, the next route event</td>
<td>Opens the Route Information screen</td>
</tr>
<tr>
<td><img src="image2.png" alt="Symbol" /></td>
<td>Trip data</td>
<td>Display trip information.</td>
</tr>
<tr>
<td><img src="image3.png" alt="Symbol" /></td>
<td>Next street or Next settlement</td>
<td>n/a</td>
</tr>
<tr>
<td><img src="image4.png" alt="Symbol" /></td>
<td>Current street and house numbers on left and right</td>
<td>n/a</td>
</tr>
<tr>
<td><img src="image5.png" alt="Symbol" /></td>
<td>Map view modes</td>
<td>Switches between 2D and 3D map modes Tap and hold to open the 3D View Settings with additional map control buttons.</td>
</tr>
<tr>
<td><img src="image6.png" alt="Symbol" /></td>
<td>GPS reception quality</td>
<td>Opens the GPS Data screen.</td>
</tr>
<tr>
<td>Symbol</td>
<td>Name</td>
<td>Action</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td><img src="image" alt="Sound" /></td>
<td>Sounds enabled/muted</td>
<td>Mutes or enables sounds.</td>
</tr>
<tr>
<td><img src="image" alt="Menu" /></td>
<td>Menu</td>
<td>Opens the Cursor menu</td>
</tr>
<tr>
<td><img src="image" alt="Rotate" /></td>
<td>Rotate left, rotate right</td>
<td>Rotates the 3D map left or right</td>
</tr>
<tr>
<td><img src="image" alt="Tilt" /></td>
<td>Tilt up, tilt down</td>
<td>Tilts the 3D map</td>
</tr>
<tr>
<td><img src="image" alt="Zoom" /></td>
<td>Zoom in, zoom out</td>
<td>Scales the map</td>
</tr>
<tr>
<td><img src="image" alt="Preset" /></td>
<td>Tilt preset buttons</td>
<td>Tap one of the preset buttons to set the tilt and zoom levels to fix, predefined values. Smart Zoom is disabled. These buttons are available in 3D View Settings mode. Tap&amp;hold any of the buttons to set its value to the current tilt and zoom levels, or to reset it to its original value.</td>
</tr>
<tr>
<td><img src="image" alt="GPS" /></td>
<td>Current GPS position (on nearest road)</td>
<td>n/a</td>
</tr>
<tr>
<td><img src="image" alt="Cursor" /></td>
<td>Cursor (selected map location)</td>
<td>n/a</td>
</tr>
<tr>
<td><img src="image" alt="Lane" /></td>
<td>Lane information</td>
<td>n/a</td>
</tr>
<tr>
<td><img src="image" alt="Orange" /></td>
<td>Orange line</td>
<td>n/a</td>
</tr>
<tr>
<td><img src="image" alt="Map" /></td>
<td>Map scale (2D map only)</td>
<td>n/a</td>
</tr>
</tbody>
</table>

If you have enabled **Highway Drive Mode** in Map Settings, additional information may appear on the left:

![Highway Drive Mode](image)

If you have enabled **Intersection Zoom** in Map Settings, when approaching a route event, a top down view of the intersection appears on the left:

![Intersection Zoom](image)
PART 4 : Reference Guide

**Icons on the map**
There are several status icons on the map. Most of them also function as a button. The information they provide is as follows:
- GPS position quality
- Vehicle type used for route calculation
- Sound status (muted or enabled)
- Bluetooth connection and communication status

**(a) Next route event (Turn Preview field)**
There is a field reserved on the Map screen to display the next manoeuvre (route event that is listed in the Itinerary). Both the type of the event (turn, roundabout, exiting motorway, etc.) and its distance from the current GPS position is displayed.
Most of these icons are very intuitive. The following table lists some of the frequently shown route events:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>◀</td>
<td>Turn left.</td>
</tr>
<tr>
<td>▶</td>
<td>Turn right.</td>
</tr>
<tr>
<td>◁, ◀</td>
<td>Turn back.</td>
</tr>
<tr>
<td>◁</td>
<td>Bear left.</td>
</tr>
<tr>
<td>▶</td>
<td>Bear right.</td>
</tr>
<tr>
<td>◁</td>
<td>Turn sharp left.</td>
</tr>
<tr>
<td>▶</td>
<td>Turn sharp right.</td>
</tr>
<tr>
<td>◁</td>
<td>Keep left.</td>
</tr>
<tr>
<td>▶</td>
<td>Keep right.</td>
</tr>
<tr>
<td>◁</td>
<td>Keep left in fork.</td>
</tr>
<tr>
<td>▶</td>
<td>Keep right in fork.</td>
</tr>
<tr>
<td>◁</td>
<td>Continue straight in the intersection.</td>
</tr>
<tr>
<td>◀</td>
<td>Enter roundabout.</td>
</tr>
<tr>
<td>◀</td>
<td>Enter motorway.</td>
</tr>
<tr>
<td>◁</td>
<td>Exit motorway.</td>
</tr>
<tr>
<td>◁</td>
<td>Board ferry.</td>
</tr>
<tr>
<td>◁</td>
<td>Leave ferry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>◀</td>
<td>Approaching the next via point.</td>
</tr>
<tr>
<td>◀</td>
<td>Approaching the destination.</td>
</tr>
</tbody>
</table>
Objects on the map

(a) Streets and roads
HAVN-100HMCIS Navigation shows the streets in a way that is similar to how the paper road maps show them. Their width and colours correspond to their importance: you can easily tell a motorway from a small street.

In INFORMATION!
If you prefer not to see street names during navigation, turn them off (Page 2-39).

(b) 3D object types
To enable or disable 3D visualisation on the map, press the SETUP button, and then tap the following buttons: Visual, 3D Settings.
HAVN-100HMCIS Navigation supports the following 3D object types:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation model</td>
<td>Hills and mountains are shown in the background of the 3D map view, and illustrated by colour on the 2D map.</td>
</tr>
<tr>
<td>Elevated roads</td>
<td>Complex intersections and vertically isolated roads (such as overpasses or underground tunnels) are displayed in 3D.</td>
</tr>
</tbody>
</table>
### 4. Reference Guide

**c) Elements of the active route**

HAVN-100HM CIS Navigation shows the route in the following way:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Symbol]</td>
<td>Current GPS position</td>
<td>Your current position displayed on the map. The arrow is put on the nearest road.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Cursor (selected map location)</td>
<td>The location selected in the Find menu, or a map point selected by tapping the map.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Via point</td>
<td>A via point is an intermediate destination. You can place as many via points as you want.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Destination (end point)</td>
<td>The last point of the route, the final destination.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Route colour</td>
<td>The route always stands out with its colour on the map, both in daytime and in night colour mode. The active leg of the route is always displayed in a brighter shade than the inactive (upcoming) legs.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Active leg of the route</td>
<td>The section of the route on which you are driving. If you have not added any via points (only a destination), the entire route is the active leg. If you have added via points, the active leg is the part of the route from your current location to the next route point (the next via point, or the destination if there are no more via points to reach).</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Inactive legs of the route</td>
<td>The future sections of the route; each of them becomes active when you reach the via point at its beginning.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Streets and roads that are excluded from the navigation</td>
<td>You can choose whether you want to use or avoid certain road types (Page 4-14). However, when HAVN-100HM CIS Navigation cannot avoid such roads, the route will include them and it will show them in a colour that is different from the route colour.</td>
</tr>
</tbody>
</table>
### Cursor menu

As soon as you select one point in the Destination menu, the map appears with the Cursor menu, a menu with possible actions for the selected point. Alternatively, you can tap ![Cursor](image) to open the Cursor menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Back" /></td>
<td>Closes the Cursor menu, and returns to the previous screen.</td>
</tr>
<tr>
<td><img src="image" alt="Cursor" /></td>
<td>Displayed at the Cursor.</td>
</tr>
<tr>
<td><img src="image" alt="Set as Destination" /></td>
<td>A new route is calculated with the Cursor as the destination. The previous route is deleted.</td>
</tr>
<tr>
<td><img src="image" alt="Remove Destination" /></td>
<td>If the Cursor is at or near the destination, this button replaces the previous one, and deletes the current destination from the route. The last via point is promoted as destination, or if there are no via points, the route is deleted.</td>
</tr>
<tr>
<td><img src="image" alt="Insert Waypoint" /></td>
<td>The Cursor is added to the active route as an intermediate route point, a point to be reached before the destination. If there is already a via point in the route, the Edit Route screen opens to let you decide where the new via point is to appear in the route.</td>
</tr>
<tr>
<td><img src="image" alt="Remove Waypoint" /></td>
<td>If the Cursor is at or near one of the via points, this button replaces the previous one, and deletes the selected via point from the route. The route is recalculated without the deleted point.</td>
</tr>
<tr>
<td><img src="image" alt="Continue" /></td>
<td>The Cursor is appended at the end of the route as the new destination. The previous destination is demoted, and becomes the last via point.</td>
</tr>
<tr>
<td><img src="image" alt="Save as POI" /></td>
<td>The Cursor is saved as a user POI. Select the POI group and give a name for the POI, then select a suitable icon, enter a phone number, and additional information if you like.</td>
</tr>
<tr>
<td><img src="image" alt="Add to Favourites" /></td>
<td>The location of the Cursor is added to the list of frequently visited destinations, the so called Favourites. You can give a name for the Favourite.</td>
</tr>
<tr>
<td><img src="image" alt="Info" /></td>
<td>Opens a new screen with the address and coordinate of the Cursor, and the list of nearby POIs.</td>
</tr>
</tbody>
</table>
4. Reference Guide

■ Route Information screen

The Route Information screen has all the data and some of the functions you need while you navigate. There are two ways to open this screen:

- It can be opened directly from the Map screen by tapping the Turn Preview field ( ).
- Press the ROUTE hardware button, and then tap Route Info .

In the top section of the screen you see information about the current route. The fields on this screen are continuously updated while you keep the screen open.

When you open the screen, all fields contain information about reaching your final destination. Tap any of the fields to see data on the via points starting from the first one through the final destination again.

You have the following data and functions on this screen:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route line</td>
<td>The upper part of this screen shows your planned route as a horizontal line. Its leftmost point is the start of the route, the rightmost one is the final destination, and you can see your via point flags along the line, spaced in proportion to their distance.</td>
<td>Tap this field to change the content of all data fields to via point information.</td>
</tr>
<tr>
<td>Estimated Arrival</td>
<td>Shows the estimated arrival time at the final destination of the route based on information available for the remaining segments of the route. The calculation cannot take into account traffic jams and other possible delays.</td>
<td>Tap this field to change the content of all data fields to via point information.</td>
</tr>
<tr>
<td>Distance Left</td>
<td>Shows the distance you need to travel on the route before reaching your final destination.</td>
<td>Tap this field to change the content of all data fields to via point information.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td>Function</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Time Left</td>
<td>Shows the time needed to reach the final destination of the route based on information available for the remaining segments of the route. The calculation cannot take into account traffic jams and other possible delays.</td>
<td>Tap this field to change the content of all data fields to via point information.</td>
</tr>
<tr>
<td>Method</td>
<td>This field shows how the route was calculated. It displays the Route Calculation Method (Fast, hort, Easy or Economical).</td>
<td>Tap this field to change the content of all data fields to via point information.</td>
</tr>
<tr>
<td>Warning icons</td>
<td>In these square fields graphical symbols are displayed in case warnings are attached to the planned route. These are warnings, so icons always show information for the whole route, even if the data fields display values from your current position to a via point only.</td>
<td>Tap any of the icons for an explanation.</td>
</tr>
<tr>
<td>Skip Next Via</td>
<td>Appears only if at least one via point exists.</td>
<td>Deletes the next via point from the route.</td>
</tr>
<tr>
<td>Fit to Screen</td>
<td></td>
<td>Opens the map screen scaled to show the entire route.</td>
</tr>
</tbody>
</table>

**GPS data screen**

Tap to open the GPS Data screen and to see the status of GPS reception.

The virtual sky shows the visible part of the sky above you, with your position as the centre.

The satellites are shown at their current positions. The GPS receives data from both the green and yellow satellites. Signals from the yellow satellites are only received, while green ones are used by the GPS receiver to calculate your current location.
4. Reference Guide

**Destination menu**
Press the **DEST** hardware button to open this screen.
Select the destination of your route.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>If you know at least a part of the address, this is the quickest way to find the location.</td>
<td>Page 2-17</td>
</tr>
<tr>
<td>POI</td>
<td>You can select your destination from the thousands of POIs included with HAVN-100HMCIS Navigation or from the ones you have previously created.</td>
<td>Page 2-22</td>
</tr>
<tr>
<td>History</td>
<td>The destinations that you have already entered in HAVN-100HMCIS Navigation are available in the History list.</td>
<td>Page 2-23</td>
</tr>
<tr>
<td>Coordinate</td>
<td>You can select your destination by entering its coordinates.</td>
<td>Page 2-23</td>
</tr>
<tr>
<td>Favourites</td>
<td>You can select as your destination a location that you have already saved as a Favourite.</td>
<td>Page 2-22</td>
</tr>
<tr>
<td>Home</td>
<td>The first (Home) and second (Work) Favourite can be accessed directly.</td>
<td>Page 2-22</td>
</tr>
</tbody>
</table>

**Route menu**
Press the **ROUTE** hardware button to open this screen.
Save, load and edit your routes.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Itinerary</td>
<td>You can browse the driving instructions that HAVN-100HMCIS Navigation follows during navigation. You can exclude manoeuvres or streets to adjust the route to your preferences.</td>
<td>Page 2-15</td>
</tr>
<tr>
<td>Route Info</td>
<td>Opens a screen with useful route data.</td>
<td>Page 2-34</td>
</tr>
<tr>
<td>Edit Route</td>
<td>You can modify the route; remove route points or change their order. You can save the active route, or you can overwrite the active route with a previously saved route.</td>
<td>Page 2-25</td>
</tr>
<tr>
<td>Avoid</td>
<td>If you want to bypass a part of the route starting from the next intersection, tap this button, and select a distance to bypass.</td>
<td></td>
</tr>
<tr>
<td>Recalculate</td>
<td>Tap this button and HAVN-100HMCIS Navigation recalculates the route with the given route preferences. The Map screen returns.</td>
<td></td>
</tr>
<tr>
<td>Remove Route</td>
<td>Erase the active route with all its route points (start point, via points and destination). If you later decide that you need the same route, you will have to rebuild it from scratch.</td>
<td>Page 2-26</td>
</tr>
<tr>
<td>Simulate</td>
<td>You can run a demonstration of the route at normal speed.</td>
<td>Page 2-26</td>
</tr>
</tbody>
</table>
Setup menu

Press the [SETUP] hardware button to open this screen.
You can configure the program settings, and modify the behaviour of HAVN-100HMCIS Navigation.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>You can fine-tune the appearance and content of the Map screen.</td>
<td>Page 2-38</td>
</tr>
<tr>
<td>Regional</td>
<td>These settings allow you to customise the application for your local language, measurement units, time and date settings and formats, as well as to choose the voice guidance profile you prefer.</td>
<td>Page 2-39</td>
</tr>
<tr>
<td>Route</td>
<td>These settings determine how routes will be calculated.</td>
<td>Page 2-40</td>
</tr>
<tr>
<td>Sound</td>
<td>You can adjust the sounds of HAVN-100HMCIS Navigation.</td>
<td>Page 2-41</td>
</tr>
<tr>
<td>My Data</td>
<td>You can manage your saved data, see the map versions in your HAVN-100HMCIS Navigation and you can reset the program settings to their factory default values.</td>
<td></td>
</tr>
<tr>
<td>Warnings</td>
<td>You can enable some useful warnings.</td>
<td>Page 2-42</td>
</tr>
</tbody>
</table>
### 4. Reference Guide

#### Map Screen settings
You can fine-tune the appearance and content of the Map screen. Select **Visual** from the Setup menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Settings</td>
<td>• 3D View Settings: Opens the map screen with map control buttons to adjust the 3D map view.</td>
</tr>
</tbody>
</table>
| Map Settings   | • Colour Profiles: HAVN-100HMCIS Navigation is able to show the map and the menus in different colours during the day and during the night. Select the colour profiles to be used in each mode, and select the automatic or manual switching between the daytime and night colour profiles.  
• Show Street Names: Street names can be disturbing on the map during navigation. With this switch you can suppress street names when HAVN-100HMCIS Navigation is following your position on the map. If you move the map, street names reappear immediately.  
• Highway Drive Mode: Turn this feature on to receive extra trip information on the left side of the Map screen.  
• Intersection Zoom: Turn this feature on to see the schematic top down view of the next intersection when you approach. |
| Smart Zoom     | Smart Zoom is a lot more than just a usual automatic zoom feature:                                                                                                                                           |
|                | While following a route calculated by **HAVN-100HMCIS Navigation**: when approaching a turn, it will zoom in and raise the view angle to let you easily recognise your manoeuvre at the next junction. If the next turn is at a distance, it will zoom out and lower the view angle to be flat so you can see the road in front of you.  
While driving without an active route in **HAVN-100HMCIS Navigation**:  
Smart Zoom will zoom in if you drive slowly and zoom out when you drive at high speed. |
| Automatic Overview | This feature switches the map view to Overview mode when the next route event is at a distance. Overview is a zoomed out 2D view to let you see the surrounding area.                                 |
Regional settings

These settings allow you to customise the application for your local language, measurement units, time and date settings and formats, as well as to choose the voice guidance profile you prefer. Select Regional from the Setup menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Language</td>
<td>This button displays the current written language of the HAVN-100HMCIS Navigation user interface. By tapping the button, you can select a new language from the list of available languages. The application will restart if you change this setting; you are asked to confirm this.</td>
</tr>
<tr>
<td>Voice Profile</td>
<td>This button shows the current voice guidance profile. By tapping the button, you can select a new profile from the list of available languages and speakers. Tap any of these to hear a sample voice prompt. Just tap Done when you have selected the new spoken language.</td>
</tr>
<tr>
<td>Units</td>
<td>You can set the distance units to be used by the program. HAVN-100HMCIS Navigation may not support all the listed units in some voice guidance languages.</td>
</tr>
<tr>
<td>Set Date &amp; Time Format</td>
<td>You can set the date and time format. Various international formats are available.</td>
</tr>
<tr>
<td>Time and Time Zone Settings</td>
<td>You can access time and time zone settings. HAVN-100HMCIS Navigation helps you with correcting the device time to the ever accurate GPS time. HAVN-100HMCIS Navigation can also help you set the time zone based on your current GPS position.</td>
</tr>
</tbody>
</table>

Time and Time Zone Settings:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Time Correction to GPS</td>
<td>Use this feature to synchronise the clock of your device to the highly accurate time provided by the GPS receiver.</td>
</tr>
<tr>
<td>Use Auto Time Zone</td>
<td>Use this feature to synchronise the time zone of the clock of your device to the time zone based on your current GPS position. This is useful if you travel abroad.</td>
</tr>
<tr>
<td>Set Time Zone</td>
<td>Set time zone manually if you do not want to synchronise the time zone automatically. This allows you to use Auto Time Correction and apply a time zone offset to obtain the desired time.</td>
</tr>
<tr>
<td>Compare GPS and device times</td>
<td>The current time of the GPS receiver and the device clock are displayed. Please note that the GPS clock is only available with GPS reception. This allows you to check whether any correction is needed.</td>
</tr>
</tbody>
</table>
### 4. Reference Guide

#### Route settings

These settings determine how routes will be calculated. Select 😈 Route 😈 from the Setup menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Types Used for Route Planning</td>
<td>To let the route fit your needs, you can also set which road types are to be considered for or to be excluded from the route, if possible. Excluding a road type is a preference. It does not necessarily mean total prohibition. If your destination can only be accessed using some of the excluded road types, they will be used, but only as much as necessary. In this case a warning icon will be shown on the Route Information screen, and the part of the route not matching your preference will be displayed in a different colour on the map.</td>
</tr>
<tr>
<td>Route Calculation Method</td>
<td>You can choose from different route types.</td>
</tr>
</tbody>
</table>

#### Road Types Used for Route Planning:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toll roads</td>
<td>By default HAVN-100HMCIS Navigation includes toll roads (pay roads where there is a per-use charge) in the routes. If you disable toll roads, HAVN-100HMCIS Navigation plans the best toll-free route.</td>
</tr>
<tr>
<td>Charge roads</td>
<td>Charge roads are pay roads where you can purchase a pass or vignette to use the road for a longer period of time. They can be enabled or disabled separately from toll roads.</td>
</tr>
<tr>
<td>Permit needed</td>
<td>You might need a permit or permission from the owners to use certain roads or to enter certain areas. HAVN-100HMCIS Navigation excludes these roads from the route calculation by default.</td>
</tr>
<tr>
<td>Ferries</td>
<td>HAVN-100HMCIS Navigation includes ferries in a planned route by default. However, a map does not necessarily contain information about the accessibility of temporary ferries. You might also need to pay a fare on ferries.</td>
</tr>
<tr>
<td>Unpaved Roads</td>
<td>Unpaved roads are excluded by default, as they can be in a bad condition and you usually cannot reach the speed limit on them.</td>
</tr>
<tr>
<td>U-turns</td>
<td>Although displayed amongst road types, this is a type of action, Most drivers prefer to replace them with a few normal left and/or right turns in the next few junctions, so it is disabled by default.</td>
</tr>
</tbody>
</table>
Route Calculation Method types:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast</td>
<td>Gives the quickest possible route if you can travel at or near the speed limit on all roads. Usually the best selection for fast and normal cars.</td>
</tr>
<tr>
<td>Short</td>
<td>Gives a route that has the smallest total distance of all possible routes between the route points.</td>
</tr>
<tr>
<td>Economical</td>
<td>Combines the benefits of Fast and Short: HAVN-100HMCIS Navigation calculates as if it were calculating the Fast route, but it takes other roads as well to save fuel.</td>
</tr>
<tr>
<td>Easy</td>
<td>Results in a route with fewer turns. With this option, you can make HAVN-100HMCIS Navigation to take, for example, the motorway instead of series of smaller roads or streets.</td>
</tr>
</tbody>
</table>

■ Sound settings

You can adjust the sounds of HAVN-100HMCIS Navigation. Select Sound from the Setup menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Guidance Volume</td>
<td>The slider adjusts the loudness of voice prompts. In its leftmost position, the voice guidance is suppressed.</td>
</tr>
<tr>
<td>Key Sounds</td>
<td>Key sounds provide audible confirmation of either pressing hardware buttons or tapping the touch screen. The switch turns key sounds on or off.</td>
</tr>
</tbody>
</table>
4. Reference Guide

■ My Data settings
You can manage your saved data, see the map versions in your HAVN-100HMCIS Navigation and you can reset the program settings to their factory default values. Select My Data from the Setup menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POI</td>
<td>You can manage your saved POIs, and set POI visibility.</td>
</tr>
<tr>
<td>Map Version</td>
<td>This screen provides information about the maps included with your navigation system</td>
</tr>
<tr>
<td>Factory Reset</td>
<td>All settings will return to their factory defaults, but no user data will be deleted.</td>
</tr>
<tr>
<td>SW Version</td>
<td>Navigation software version will be displayed.</td>
</tr>
</tbody>
</table>

■ Warning settings
You can enable some useful warnings, and disable the touch screen in a moving vehicle with Safety Mode. Select Warnings from the Setup menu.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
</table>
| Warn When Speeding      | Maps may contain information about the speed limits of the road segments. HAVN-100HMCIS Navigation is able to warn you if you exceed the current limit. This information may not be available for your region (ask your local dealer), or may not be fully correct for all roads in the map. This setting lets you decide whether you wish to receive the warnings. You can set the relative speeding level at which the application warns you (100% represents the current speed limit). There are two types of warnings. You can turn them on or off independently:  
  • Audible Warning: A voice message is played using the selected voice guidance profile.  
  • Visible Warning: A symbol with the speed limit appears in the corner of the map (for example: 50). |

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5. Glossary

■ 2D/3D GPS reception
The GPS receiver uses satellite signals to calculate its (your) position and needs at least four signals to give a three-dimensional position, including elevation. Because the satellites are moving and because objects can block the signals, your GPS device might not receive four signals. If three satellites are available, the receiver can calculate the horizontal GPS position but the accuracy is lower and the GPS device does not give you elevation data: only 2D reception is possible.

■ Active route
The currently navigated route. You can save and load routes in HAVN-100HMCIS Navigation, but only one route can be active at any given time, and it is always active until you delete it, reach your destination or you quit HAVN-100HMCIS Navigation. See also: Route.

■ City Centre
The City Centre is not the geometric centre of the settlement but an arbitrary point the map creators have chosen. In towns and villages, it is usually the most important intersection; in larger cities, it is an important intersection. GPS accuracy Several factors have impact on the deviation between your real position and the one given by the GPS device. For example, signal delay in the ionosphere or reflecting objects near the GPS device have a different and varying impact on how accurately the GPS device can calculate your position.

■ Map
HAVN-100HMCIS Navigation works with digital maps which are not simply the computerised versions of traditional paper maps. Similarly to the paper road maps, the 2D mode of digital maps show you streets, roads, and elevation is also shown by colours. In 3D mode, you can see the altitude differences, for example valleys and mountains, elevated roads, and in selected cities 3D landmarks and 3D buildings are also displayed.

You can use digital maps interactively: you can zoom in and out (increase or decrease the scale), you can tilt them up and down, and turn them left and right. In GPS-supported navigation, digital maps facilitate route planning.

■ North-up map orientation
In North-up mode the map is rotated so its top always faces North. This is the orientation in 2D map view mode and in Overview mode. See also: Track-up map orientation.

■ Overview mode
You can instruct HAVN-100HMCIS Navigation to automatically switch to Overview mode if the next route event is in a distance. In Overview mode the map is shown in 2D but scaled down to a predefined zoom level. When you approach the next route event, the previous 2D or 3D map view returns automatically.
5. Glossary

■ Route
A series of destinations to be reached one after the other. A simple route contains one start point and only one destination. Multi-point routes contain one or more via points (intermediate destinations). The last route point is the final destination and the route is cut into different legs (from one destination to the next).

■ Scheme
HAVN-100HMCIS Navigation comes with different colour schemes for the map for daytime or night use. Schemes are custom graphic settings for the map and they can have different colours for streets, blocks or surface waters in 2D and 3D modes, and they display shades or shadows in different ways in 3D mode.
One daytime scheme and one night scheme is always selected. HAVN-100HMCIS Navigation uses them when it switches from day to night and back.

■ Track-up map orientation
In Track-up mode the map is rotated so its top always points in the current driving direction. This is the default orientation in 3D map view mode. See also: North-up map orientation.
6. End User Licence Agreement

■ The contracting parties
● Contracting parties to this Agreement are, on the one hand:
Nav N Go Kft. (23 Bérc utca, H-1016 Budapest, Hungary; Hungarian reg.no.: 03-09-111944) as Licensor and the legal user (as defined in Section 2) of the object of this Agreement according to Section 4, hereinafter referred to as User on the other hand (hereinafter jointly referred to as Parties).

■ Conclusion of the Agreement
● The Parties hereby acknowledge that this Agreement shall be concluded by implicit conduct of the Parties, without a signature of the Parties.
● The User hereby acknowledges that following the lawful acquisition of the software product constituting the object of this Agreement (Section 4), any degree of use, installation to a computer or other hardware, installation of such hardware into a vehicle, pressing of the “Accept” button displayed by the software during installation or use (hereinafter referred to as Actions of Use) shall be deemed as implicit conduct resulting in the conclusion of the Agreement between the User and the Licensor.
● This Agreement shall by no means entitle persons who unlawfully acquire, use, install on a computer, install in a vehicle or utilise in any manner whatsoever the Software Product.
● The End User Licence Agreement between the Parties shall be concluded with terms set forth in this Agreement.
● The time of conclusion of this Agreement is the time of executing the first Action of Use (commencement of use).

■ Applicable law
● In issues not regulated by this Agreement, the jurisdiction of the Republic of Hungary shall be applicable, with specific reference to the Act No. 4 of 1959 on the Civil Code (CC) and to Act No 76 of 1999 on Copyrights (CA).
● This agreement is issued in English and Hungarian.

■ The object of the Agreement
● The object of this Agreement shall be the navigation guidance software product of Licensor (hereinafter referred to as Software Product).
● The Software Product shall include the operating computer program, its complete documentation, and the map database belonging thereto.
● Any form of display, storage, coding, including printed, electronic or graphic display, storage, source or object code of the Software Product, or any other as yet undefined form of display, storage, or coding, or any medium thereof shall be deemed as part of the Software Product.
● Error corrections, additions, updates used by the User as defined in Section 2 following the conclusion of this Agreement shall also be deemed as part of the Software Product.

■ Owner of copyrights
● The Licensor - unless contractual or legal regulations state otherwise - is the exclusive owner of all material copyrights vested in
6. End User Licence Agreement

the Software Product.
- Copyrights extend to the whole Software Product and its parts separately as well.
- The owner(s) of the copyrights of the map database forming part of the Software Product is (are) natural person(s) or corporate entity(ies) as listed in the Appendix to this Agreement or in the “About/Map” menu item of the operating computer program (hereinafter referred to as Database Owner). Licensor hereby states that Licensor has obtained sufficient usage and representation rights from the Database Owner in order to utilise and give into further utilisation the map database as set forth in this Agreement.
- In the conclusion and execution of this Agreement the Database Owner is represented by Licensor in relations to the User.
- By concluding this Agreement, Licensor shall withhold all rights vested in the Software Product, except for those that the User is entitled to according to explicit legal regulations or that of this Agreement.

■ Rights of the User
- The User is entitled to install the Software Product on one hardware device (desktop, handheld, portable computer, navigation device) at a time, and to run and use one copy thereof.
- The User is entitled to make one security copy of the Software Product. However, if the Software Product is operational after installation without the use of the original media copy, then the original media copy is deemed to be a security copy. In all other cases, the User is only entitled to use the security copy if the original media copy of the Software Product has become unsuitable for proper and legal use without any doubt, such state thereof being supported by acceptable proof.

■ Limitations of use
- The User is not entitled
  - to duplicate the Software Product (to make a copy thereof);
  - to lease, rent, lend, distribute, transfer it to a third person with or without a consideration;
  - to translate the Software Product (including translation (compilation) to other programming languages);
  - to decompile the Software Product;
  - to modify, extend, transform the Software Product (in whole or in part), to separate it into parts, compose it with other products, install it in other products, utilise it in other products, not even with the aim of achieving interoperability with other products;
  - apart from using the computer program, to obtain information from the map database included in the Software Product, to decompile the map database, to use, copy, modify, extend, transform the map database in whole or in part or the group of data stored therein, or to install it in other products, utilise it in other products, not even with the aim of achieving interoperability with other products;
■ Non-warranty, limitation of responsibility

- Licensor hereby informs the User that although the greatest care was taken in producing the Software Product, yet with respect to the essence of the Software Product and the technical limitations, the Licensor does not warrant for the Software Product being completely error-free, and the Licensor is not bound by any contractual obligation by which the Software Product obtained by the User should be completely error-free.
- The Licensor does not warrant that the Software Product is suitable for any purpose defined either by the Licensor or the User, and does not warrant that the Software Product is capable of interoperating with any other system, device or product (e.g. software or hardware).
- The Licensor does not assume any responsibility for damages incurred due to an error in the Software Product (including errors of the computer program, the documentation and the map database).
- The Licensor does not assume any responsibility for damages incurred due to the Software Product not being applicable for any defined purpose, or the error or lack of interoperability thereof with any other system, device or product (e.g. software or hardware).
- The Licensor shall hereby also draw the attention of the User with great emphasis to the fact that while utilising the Software Product in any form of transportation, observing the traffic regulations and rules (e.g. use of obligatory and/or reasonable and suitable security measures, proper and generally expected care and attention in the given situation, and special care and attention required due to utilising the Software Product) is the exclusive responsibility of the User; the Licensor shall not assume any responsibility for any damages occurred in relation to utilising the Software Product during transportation.
- By concluding this Agreement, the User shall especially acknowledge the information stated in Section 8 above.

■ Sanctions

- The Licensor hereby informs the User that according to regulations of the CA, should the Licensor find its rights to be breached, the Licensor may
  - claim the acknowledgement of such breach by court;
  - claim ceasing the breach and ordering the person under breach from continuing such;
  - claim that the person under breach give proper compensation (even by way of publicity, to the expense of the person under breach);
  - claim the return of the increase of assets due to the breach;
  - claim ceasing the breaching situation, the restitution of the state before the breach, to the expense of the person in breach, and may claim the destruction of instruments and materials used for the breach, and that of the objects created by the breach;
  - claim damages.
6. End User Licence Agreement

- The Licensor hereby also informs the User that the breach of copyrights and related rights is a crime according to Act IV of 1978 on the Hungarian Criminal Code, which may draw as a sanction a sentence of two years in prison in basic cases and up to eight years in prison in qualified cases.
- For disputes arising from this Agreement, the parties hereby agree on the exclusive competence of - depending on value and title disputed - either the Central Court of Budapest Districts (Pesti Központi Kerületi Bíróság) or the Municipal Court of Budapest (Fivárosi Bíróság).

A/S CENTER

MOTREX

Bolshaya Yushunskaya, D.1a, K.1, office 410

Tel : +7 495 318 1527
Mobile : 8-916-980-65-55
E-Mail : asnavi@motrex.co.kr
LIMITED WARRANTY
ORIGINAL NAVIGATION HEAD UNIT SUPPLIED BY VEHICLE DEALER

Product :
Product No. :

WHAT THIS WARRANTY COVERS
1. Vehicle Dealer Shop ("Dealer") warrants to you that the Hardware will be free from defects in workmanship and materials under normal use ("Defects") for a period of three (3) years/60,000KM from the date that the Hardware was first installed by DEALER ("Warranty Period"). During the Warranty Period the Hardware will be repaired or replaced at DEALER's choice ("Limited Warranty") without charge to you for either parts or labor. This Limited Warranty covers the replacement of the head unit including of the Hardware only.

WHAT THIS WARRANTY DOES NOT COVER
2. The Limited Warranty does not apply to normal wear and tear, does not apply when the Hardware is opened or repaired by someone not authorized by DEALER and does not cover repair or replacement of any Hardware or part thereof damaged by: misuse, moisture, liquids, proximity or exposure to heat and accident, abuse, non-compliance with the instructions supplied with the Hardware, neglect or misapplication. The Limited Warranty does not cover physical damage to the surface of the Hardware. This Limited Warranty does not cover any software that may accompany or be installed on the Hardware.
   The Limited Warranty does not cover the installation, removal or maintenance of the Hardware or any costs related herewith.
HOW TO MAKE A WARRANTY CLAIM

3. In order to make a claim of a Defect, you must contact DEALER during the Warranty Period via www.motrex.com to explain the Defect and to obtain an RMA number (Return Materials Authorization) if necessary.

You must return the Hardware during the Warranty Period, along with the RMA number provided by DEALER and an explanation of the Defect, to the address provided to you by DEALER. If a defect arises and a valid claim under this Limited Warranty is received by DEALER after the first 3yrs/60,000KM of the Warranty Period, DEALER is entitled to charge you for any reasonable shipping and handling costs made in connection with the repair or replacement of the Hardware. You must comply with any other return procedures stipulated by DEALER, if any.

DEALER LIMITED WARRANTY

YOUR LEGAL RIGHTS

4. Some countries may not allow the exclusion or limitation of damages. If any part of this Limited Warranty is held to be invalid or unenforceable, the remainder of the Limited Warranty shall nonetheless remain in full force and effect.

5. This Limited Warranty is the only express warranty made to you and is provided in place of any other express warranties or similar obligations (if any) created by any advertising, documentation, packaging, or other communications.

6. Except for the Limited Warranty and to the maximum extent permitted by applicable law, DEALER and its suppliers provide the Hardware "AS IS AND WITH ALL FAULTS", and hereby disclaim all other warranties and conditions, whether express, implied or statutory, including, but not limited to, any (if any) implied warranties, duties or conditions of satisfactory quality, of fitness for a particular purpose, of reliability or availability, of accuracy or completeness of responses, of results, of workmanlike effort, of lack of viruses, and of reasonable care and skill, all with regard to the Hardware, and the provision of or failure to provide support or other services, information, software, and related content through the Hardware or otherwise arising out of the use of the Hardware. Also, there is no warranty or condition of quiet enjoyment, quiet possession, or non-infringement with regard to the Hardware.

7. This Limited Warranty does not affect any legal rights under applicable national legislation governing the sale of consumer goods.

8. This Limited Warranty cannot be transferred to any other person.
LIMITATION OF LIABILITY

9. Neither DEALER nor its suppliers shall be liable to you or to any third party for any damages either direct, indirect, incidental, consequential or otherwise (including in each case, but not limited to, damages for the inability to use the equipment or access data, loss of data, loss of business, loss of profits, business interruption or the like) arising out of the use of or inability to use the Hardware even if DEALER has been advised of the possibility of such damages.

10. Notwithstanding any damages that you might incur for any reason whatsoever, the entire liability of DEALER and any of its suppliers shall be limited to the amount actually paid by you for the Hardware.

11. DEALER shall not be liable for
   (I) any fraud on the part of its employees and/or agents; or
   (I) any fraudulent misrepresentation on the part of its employees and/or agents.

12. Notwithstanding the above, neither party's liability for death or personal injury resulting from its own negligence shall be limited.
Dealer Warranty Card

Product Information

Model/Language
Serial Number
Date of Purchase

Owner Information

Name
Telephone No.
Address
E-Mail

Problem Description