

Thank you for your choosing our product. We hope you will find the instructions on this user manual clearly and easily to follow. If you take a few minutes to look through it, you'll learn how to use all the features of your new Unit for maximum enjoyment.

After you have finished reading the instructions, please keep this manual in a safe place for future reference.



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- Note:** 1. *certain descriptions in this book may differ from the actual unit.*
2. *Some pictures or icons in the book may differ from actual display.*
3. *Specifications subject to change without notice.*

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Part 1 Head Unit

NÂVsure

N420i (V02)

1 Preparation

Please read all of the instructions before beginning the installation. We recommend having your unit installed by a credible installation shop.

1.1 Features

- Single DIN size, all-in-one integrated entertainment system.
- Built-in DVD Player, automotive specification slot loading mechanism.
- Built-in RDS FM/AM Tuner.
- SD card reader with READ functionality.
- High resolution 7" (16:9) TFT color monitor, contrast and brightness adjustment, with LCD dot matrix display.
- Built-in 40W X 4 amplifier, 3.5 channel surround sound output.
- Turn out and slot-in panel structure.
- Smart Touch-screen operation.
- Buttons and Encoder operation.
- Built-in Navigation Control.
- All functions can be operated by included Remote Control.

1.2 Tools and Supplies

You will need these tools and supplies to install your unit.

- Torx type, flat-head and Philips screwdrivers
- Wire cutters and strippers
- Tools to remove existing radio (screwdriver, socket wrench set or other tools)
- Electrical tape
- Crimping tool
- Multimeter
- Crimp connections
- 18 gauge wire for power connections
- 16 – 18 gauge speaker wire
- Heatshrink tubing
- Soldering iron and solder

1.3 Warnings

1. Only connect the unit to a 12-volt negative ground system.
2. Never install this unit where operation and viewing could interfere with safe driving conditions.
3. To reduce the risk of a traffic accident (except when using for rear view video camera) never use the video display function while driving the vehicle. This may be in violation of local laws.
4. To reduce the risk of a traffic accident, never drive with the sound at a level that prevents you from hearing sounds outside around the vehicle.
5. Never disassemble or adjust the unit without the assistance of a professional. For details, please consult your local car stereo specialty shop.
6. To prevent injury from shock or fire, never expose this unit to moisture or water.
7. Never use irregular discs, the only recommended disc size is a 12cm round disc.
8. To prevent damage to the mechanism inside this unit, avoid impact to the TFT monitor.
9. Do not change the fuse on the power wire without professional guidance. Using an improper fuse may cause damage to the unit and result in a fire.

10. The monitor employs an automatic motorized mechanism. To prevent damage to the core mechanism, please do not push, pull or swivel the monitor manually.

1.4 Disconnecting the Battery

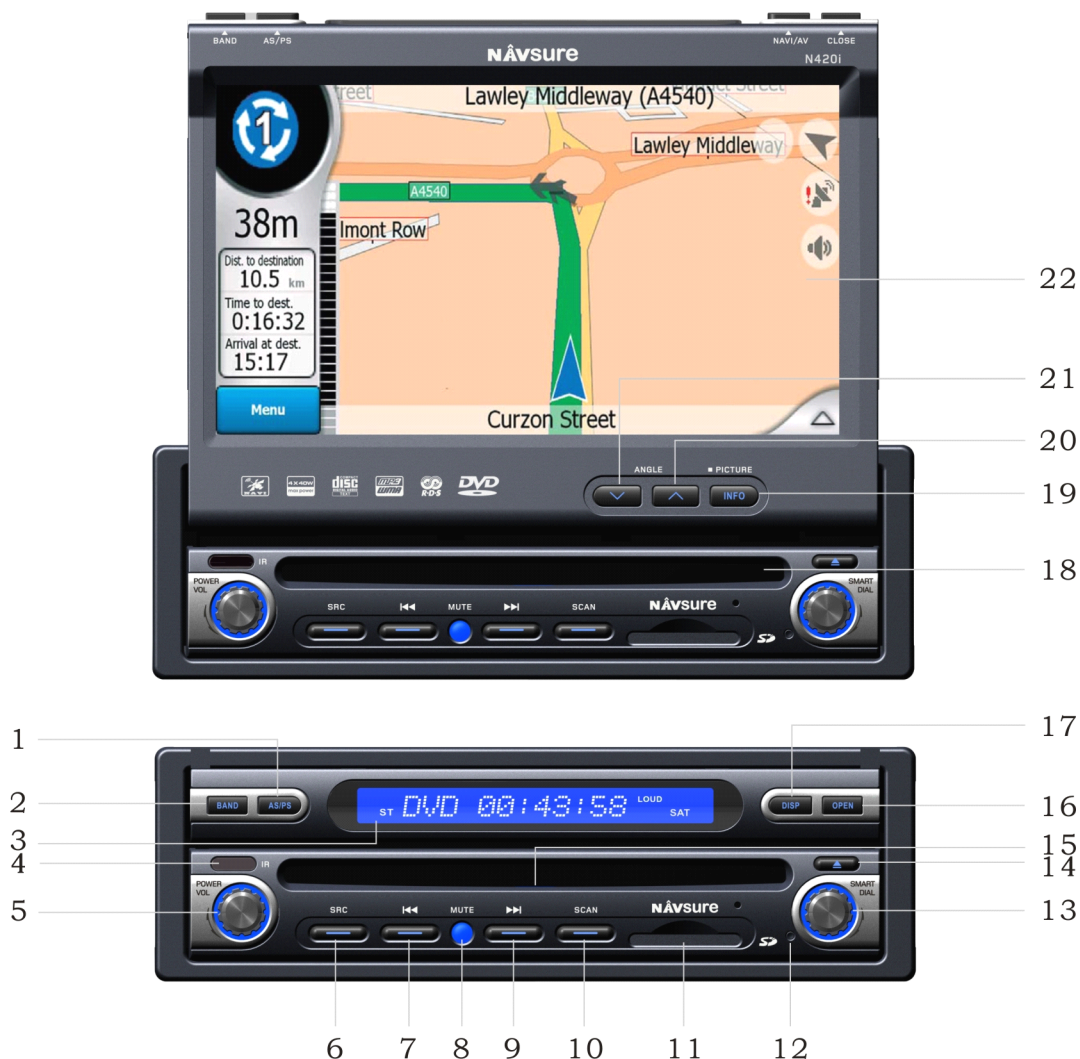
To prevent a short circuit, turn off the ignition and remove the negative (-) battery cable prior to starting the installation.

Note: *If the unit is to be installed in a car equipped with an on-board drive or navigation computer, do not disconnect the battery cable. If the cable is disconnected, the preset memory may be erased. Under these conditions, use extra caution during installation to avoid causing a short circuit.*

Note: *It is especially important that you read the **WARNINGS** and **NOTES** in this manual.*

2 Controls and Indicators

2.1 Button Operation



1. **AS/PS** (Auto store/program scan)

Press to auto store strong radio stations in the 6 preset channels in the current band.

Press and hold to start to scan radio stations stored in the 6 preset channels in the current band.

2. **BAND**

Press to change among the following bands: FM1、FM2、FM3、AM1、AM2.

3. **LCD DISPLAY**

4. **IR REMOTE CONTROL RECEIVER**

5. **POWER/VOL**

Rotary encoder.

Press the encoder to turn on the unit, press and hold to turn off.

Rotate clockwise/counterclockwise to adjust the volume.

Press to enter the audio adjust menu when the unit is on.

6. **SRC**

Press to select a source.

7. **PREVIOUS**

Select the previous chapter/track for playback.

Seek an available radio station by decreasing tuning frequency

8. **MUTE**

Press the MUTE button to mute the volume, and press the button again to restore the volume.

9. **NEXT**

Select the next chapter/track for playback.

Seek an available radio station by increasing tuning frequency

10. **SCAN**

Press the button to activate/deactivate Scan Mode.

Press and hold the button to activate/deactivate Traffic Announcemen (TA) function.

11. **SD CARD SLOT**

12. **RESET**

Use this button to restart the machine.

13. **SMART DIAL**

Rotary encoder.

Press the encoder to access MAIN menu.

Rotate clockwise/counterclockwise to select a desired item and press to access or confirm.

14. **EJECT**

Press once for disc insertion/ejection.

15. **DISC INDICATOR LIGHT**

It is blue when there is no disc in the slot, otherwise, it is red.

16. **OPEN**

Press the button to activate the motorized system and move the TFT monitor into viewing position. Press again to close the TFT.

17. **SHORT WAY TO SWITCH TO THE NAVIGATION SOURCE**

18. **DISC SLOT**

19. **INFO/PICTURE**

Press to display the playing information on the screen on Navigation mode. If the TFT monitor is closed, the playing information will display on the LCD screen.

Press and hold to access the picture setup.

20. **ANGLE[^]**

Press the button to adjust the upward tilt angle of the screen one step at a time.

Press and hold this button to continuously adjust the upward tilt.

Press this button to adjust the picture settings in picture setup.

21. **ANGLE^v**

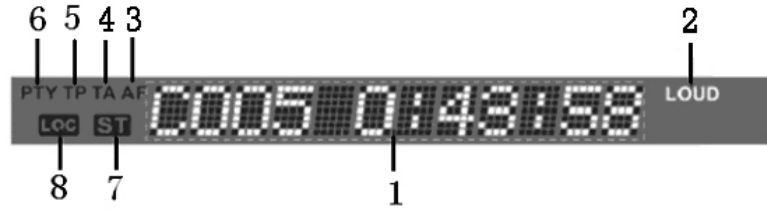
Press the button to adjust the downward tilt angle of the screen one step at a time.

Press and hold this button to continuously adjust the downward tilt.

Press this button to adjust the picture settings in picture setup.

22. **TFT DISPLAY**

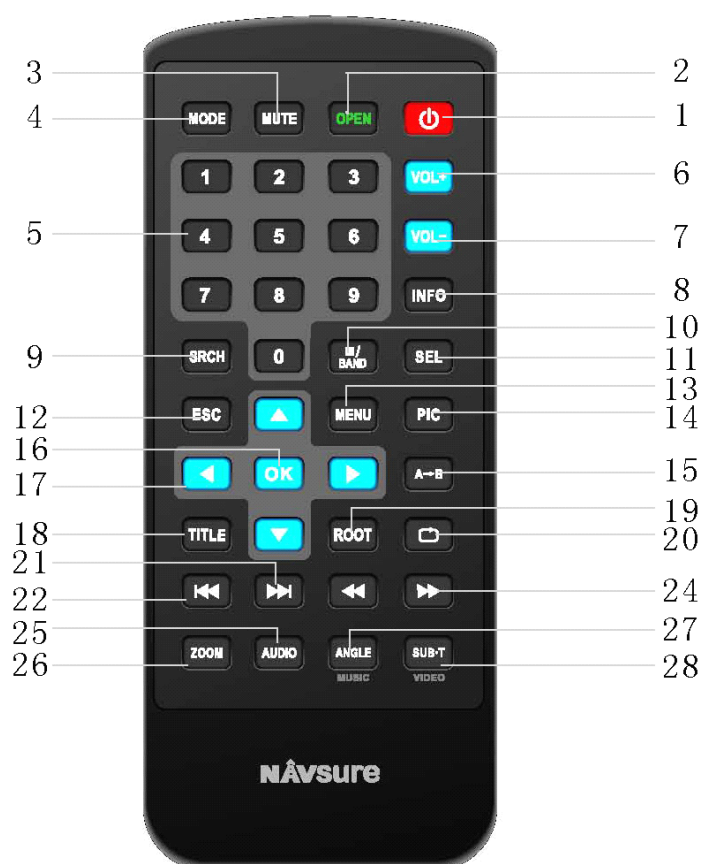
2.2 LCD Display / Indicators



1. Main display area, displays the time, tuning frequency and other text information.
2. Loudness indicator, Indicates the LOUD function is activated or not.
3. Alternative Frequency (AF) indicator.
4. Traffic Announcement (TA) indicator.
5. Traffic Program (TP) indicator.
6. Program Type (PTY) indicator.
7. Stereo broadcasting indicator, Indicates the radio is in stereo mode or not.
8. Local indicator, Indicates the local radio station seeking function is activated or not.

3 Remote Control

3.1 Front Zone Remote Control



Name	Ref #	Signal	Function
Power	1	⏻	Turn the power on/off
Open	2	OPEN	Open/close the TFT monitor
Mute	3	MUTE	Toggles on/off audio output
MODE	4	MODE	Select playing mode
Numeric button	5	1.2.3.4. 5 6.7.8.9. 0	Directly access certain chapter / track / preset station in current band
VOL up	6	VOL+	Increase the volume
VOL down	7	VOL-	Decrease the volume
Information	8	INFO	Display playing information
GOTO search	9	-/--	Position search function on DVD/CD mode
Stop/Band	10	■/BAND	Selects FM/AM band on Tuner mode Stop playback on others mode
Select	11	SEL	Enter the audio settings
ESC	12	ESC	Exit the current menu
Menu	13	MENU	Enter the main menu of system

Picture	14	PIC	Adjust the parameter of TFT settings
Repeat A→B	15	A→B	Set start point A and end point B to repeat continually
OK	16	OK	Start or pause playback, confirm the settings
Direction buttons	17		Up/down/left/right to select items for setting
Title	18	TITLE	Also can activate and disable SCAN mode while playing DVD/CD
Root	19	ROOT	Enter the main menu of the disc
Repeat	20		Repeat playback for current chapter
Next	21		Select the next chapter/track for playback on DVD/CD mode Search an available radio station by increasing tuning frequency on tuner mode
Previous	22		Select the previous track for playback on DVD/CD mode Search an available radio station by decreasing tuning frequency on tuner mode
Fast Reverse	23		Fast reverse the disc content of DVD/CD
Fast Forward	24		Fast forward the disc content of DVD/CD
Audio	25	AUDIO	/
Zoom	26	ZOOM	/
Angle	27	ANGLE	Play in different angle for a scene
SUB Title	28	SUB-T	/

4 TFT Monitor Operation

4.1 Open/Close the TFT Monitor

Press the (**OPEN**) button on the front panel or press the **OPEN** button on the remote control to open/close the monitor.

4.2 TFT Monitor Auto Open

If “TFT Auto Open” is “On”, when the unit is turned on, the monitor automatically opens to the last viewing position, and closes automatically when the unit is turned off.

If “TFT Auto Open” is “Off”, when the unit is turned on, the monitor will not open automatically, but will close automatically when the unit is turned off. You can press the (**OPEN**) button on the front panel or the **OPEN** button on the remote control to move the monitor into the desired viewing position.

If “TFT Auto Open” is “Manual”, when the unit is turned on or turned off, the monitor has no movement.

See “General setting” for details.

4.3 Monitor Tilt Angle Adjustment

The monitor angle can be adjusted for optimum viewing using one of the following methods:

Press the (▲) or (▼) buttons on the front panel to adjust the tilt angle of the screen one step at a time.

Press and hold the (▲) or (▼) buttons to continuously adjust the tilt angle.

Adjust the “Screen Tilt” in the “Screen setting” to adjust the tilt of the screen to the desired degree.

4.4 Image Setting

Video Output Format

The table below shows the video output format for each source.

Video Output Format

Playing Source	Video Output Format
FM/AM Tuner	RGB Mode
DVD/CD	RGB Mode
NAVI	RGB Mode
CAMERA	CVBS Mode
AUX IN	CVBS Mode

*CVBS-- Composite Video Base band Signal

Adjustable Parameters

While on RGB mode, the only parameter that can be adjusted is brightness (BRIGHT). To access “PICTURE”, “COLOUR”, “CONTRAST” and “BRIGHT”, you must be on CVBS mode.

Parameter Adjustment Procedure

1. Enter Picture Quality Setting Mode:

Press the **PIC** button on the remote or press and hold the **INFO** button on the front panel of the unit.

2. Select Items to Set:

Press the (▲ / ▼) buttons on the remote or rotate the **SMART DIAL** button clockwise / anticlockwise to select an item on CVBS mode.

3. **Set Parameters:**

Press the (◀/▶) buttons on the remote or press the **ANGLE** button (∧/∨) on the front panel to adjust the selected feature to the desired setting. Rotate the "VOL" on the front panel can also adjust the selected feature.

4. **Exit Picture Quality Setting Mode:**

Press the **PIC** button on the remote or press and hold the **INFO** button on the unit.

4.5 *Parking Brake Interlock*

1. Parking brake function is overridden when the video source is set to CAMERA
2. When the "parking brake interlock" is active, the front monitor displays a caution message with a blue background, preventing the driver from watching video while driving.
3. All of the above setup. Prevent the drive from disturbing, ensure safe driving.

Please see "INSTALLATION SECTION" for installation.

4.6 *Monitor Movement Mechanism*

If an obstruction occurs on the monitor path, the motion will stop automatically to prevent damage for the mechanism or monitor.

Normal operation is resumed by pressing the **OPEN** button or disconnecting and reconnecting the power.

5 Operating Instructions

5.1 Power On / Off

Press the **POWER/VOL** button to turn the unit on. The buttons on the front of the unit are illuminated and start up message is briefly displayed on the LCD screen, and then displays the current mode status. You can also turn on the unit by pressing the () button on the remote control.

Press and hold the **POWER/VOL** button on the front panel for more than 1 second or press the () button on the remote to power off the unit. The monitor is drawn back into the main compartment and the LCD screen displays "BYE BYE".

NOTE: The operating voltage range is 10.5V - 16V. The unit will power off automatically to protect itself, when the voltage is out of the operating range.

5.2 Playing Source Selection

Press the **SRC** button on the front panel or the **MODE** button on the remote to select among the available sources: TUNER, DVD, NAVI, AUX IN, Camera. The selected playing mode is displayed on the TFT or LCD screen.

5.3 AUX IN Mode

An external peripheral device can be connected to this unit via RCA cables to the "AUX-IN".

5.4 Volume Adjustment

To increase or decrease the volume level, turn the **POWER/VOL** on the front panel or press the (**VOL+ / VOL-**) buttons on the remote control. The volume ranges from "0" to "40". The default volume is "10" when the unit is powered on each time. Default volume memory setup: Rotate Power/VOL knob on the front panel to select volume value and then press and hold the Power/VOL button until you hear a single beep. When you hear the beep, setup is completed.

5.5 Audio Control Menu

The Audio Control feature allows you to easily adjust your audio system to meet the acoustical characteristics of your vehicle, which vary depending on the type of vehicle and its measurements. To get the best possible sound quality from your new system, be sure to adjust the settings for the speakers as well. Proper setting of the Fader and Balance enhances the effects of the cabin equalizer.

Accessing the Audio Control Menu

Press the **POWER/VOL** on the front panel once or press the (**SEL**) button on the remote control to enter the "Audio" menu.

Selecting an Audio Feature for Adjustment

Press the  /  buttons on the remote to select a item to be adjusted.

Rotate the "Smart Dial" on the front panel to select a item to be adjusted.

Adjusting an Audio Feature

Press the ( / ) buttons on the remote or rotate the **POWER/VOL** clockwise/counterclockwise to adjust the selected feature to the desired setting.

Audio Adjustments

Audio Function	Adjustable Range
EQ	User
	Flat
	Jazz
	Pop
	Classic
	Rock
	News
	Urban
	Rave
	Movie
	Techno
BASS	-7 to +7
TREBLE	-7 to +7
FADE	-9 to +9
BAL	-9 to +9
S W	-7 to +7
LOUD	Off, Level1-4

Note: The Bass and Treble levels are only adjustable when EQ is on "User" mode.

The Loudness function compensates for deficiencies in sound ranges at low levels. Loudness levels range from 1-4 or "off". When the Loudness function is on, LOUD is displayed on the screen.

Exiting the Audio Control Menu

Press and hold the **POWER/VOL** button on the front panel to exit the audio control menu or press the escape arrow on the top right corner of the TFT display.

Press the (**ESC**) button on the remote control to exit the audio control menu.

5.6 System Reset

To correct a system halt or other illegal operation, use the tip of a pen to press the **RESET** button located on the front bottom-right corner of the unit. After a system reset, the unit system setup restores the setting before last power off.

5.7 Mute

Press the **MUTE** button on the front panel or the **MUTE** button on the remote to mute the volume from the unit.

Note: Press the **MUTE** button again to restore the volume.

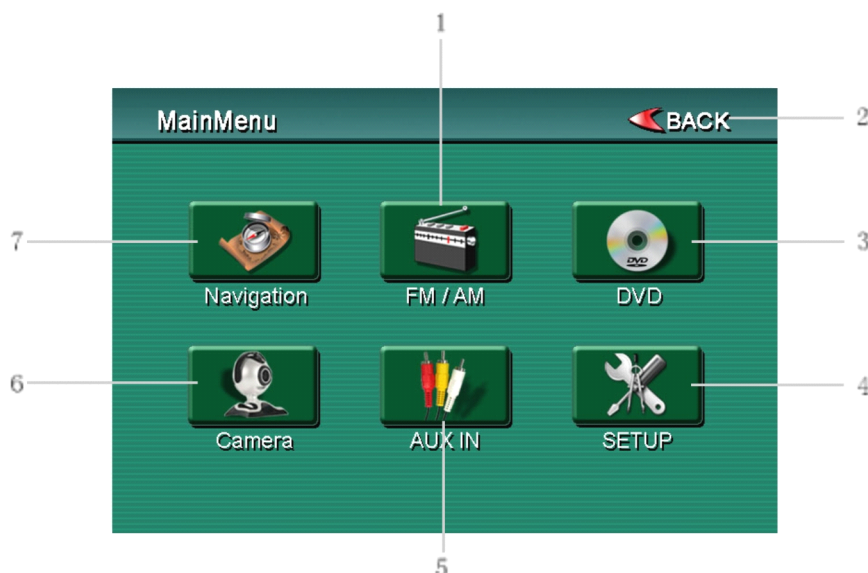
Adjusting the volume or using any of the audio set-up features will cancel the mute function.

6 System Setup Menu

6.1 MAIN Menu

There are three methods to access the **MAIN** menu.

- Press the **SMART DIAL** button on the front panel.
- Press the **MENU** button on the remote control.
- Touch the **top left corner** on the touch-screen.



1. Touch to access Tuner mode.
2. Touch to turn to the previous menu.
3. Touch to access DVD/CD mode.
4. Touch to access General setup.
5. Touch to access AUX IN mode.
6. Touch to access Camera mode.
7. Touch to access Navigation mode.

Note: Remote, touch screen operations and buttons on front panel are all use able to select menu and adjust settings. The following instructions will show the different ways to access menus and adjustments.

6.2 General setup Menu

Accessing the General Setup Menu

- Select the  button on the bottom of the touch screen to access the General setup.



Selecting a Feature for Adjustment

Press the direction buttons on the remote control or touch the option directly on the screen to select the feature to be adjusted.

Adjusting a Feature

1. Enter the option field for the feature you want to adjust by pressing the **(OK)** button on the remote or by pressing the **SMART DIAL** button. A submenu appears in a second row with the selected option.
2. Select a new value by pressing the direction button.
3. Confirm your selection by pressing **(OK)** button or pressing the **SMART DIAL** button. The new value setup is complete.

Adjusting the Clock

1. Access the “Clock” setting under the General Setup menu.
2. Press the direction button on the remote to move the cursor to the “Hour” or “Min” position, and press the **(OK)** button. You also can touch the “Hour” or “Min” position directly.
3. The numeric keypad will pop up.
4. Press the numeric button on the remote control or touch the numeric keypad on the screen to adjust the hour or minutes.
5. Press the **(OK)** button on the remote control or on the keypad of the screen to confirm setup.

Return to normal playback

1. The system will automatically return the previous playback mode that it was in before accessing the setup menu 20 seconds after the last operation.
2. Select the  button on the bottom of the screen, and the system will return the previous playback mode.

Note: Select the  button on the bottom of the screen, and the system will access the **MAIN** menu.

Setting	Options	Function
Radio	USA	Select the appropriate setting based on the country in which you reside.
	S-America	
	Europe	
Clock	(HH:MM)	See “Adjusting the clock” to learn how to set the clock.
Clock Mode	12Hr	Clock displays 12 hour time using AM and PM.
	24Hr	Clock displays 24 hour time up to 23:59
Camera Image	Normal	The output of Camera Image is in normal mode
	Reverse	The output of Camera Image is in reverse mode
Video Format	Auto	Selecting Video Format.
	NTSC	
	PAL	
TFT Auto Open	On	The TFT panel automatically opens when the unit is turned on.
	Off	You must press the OPEN button on the TFT panel or on the remote to open the TFT.
	Manual	The monitor does not open or close when the unit is turned on or turned off.

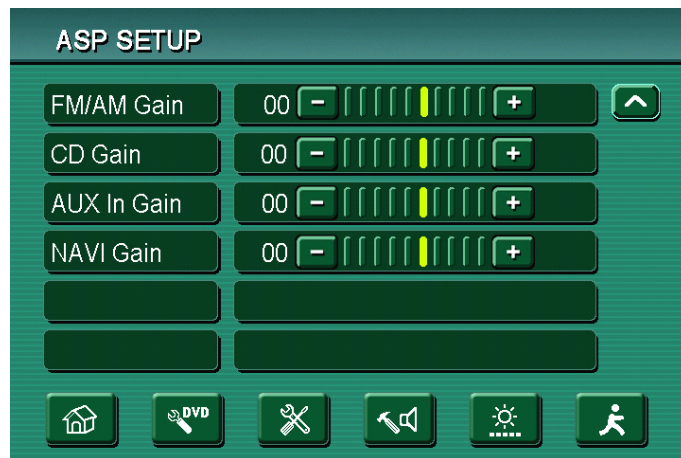
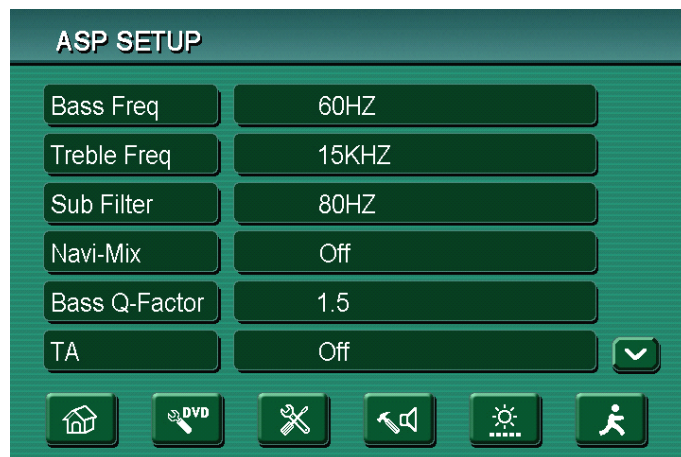
6.3 ASP(Audio Signal Processing) Configuration Menu

The ASP Configuration menu allows you to make fine audio adjustment.

Accessing the ASP Configuration Menu

Select the  button on the bottom of the screen, then Select the  button on the bottom of the screen to access the ASP setup.

A menu appears with the option for the first item, and then you can touch the  button to the option on the next page.



Selecting a Feature for Adjustment

Press the direction buttons on the remote control or touch the option directly on the screen to select a feature to be adjusted.

Adjusting a Feature

1. Enter the option field for the feature you want to adjust by pressing the **(OK)** button on the remote or by pressing the **SMART DIAL**. A submenu appears in a second row with the selected option.
2. Select a new value by pressing the direction button.
3. Confirm your selection by pressing **(OK)** button on the remote control or pressing the **SMART DIAL** on the front panel. The new setup is complete.

Return to normal playback

The system will automatically return the previous playback mode that it was in before accessing the setup menu 20 seconds after the last operation.

Setting	Options	Function
Bass Freq	60Hz	Depending on the audio source, select the Bass Center Frequency to achieve the best Bass effect.
	80Hz	
	100Hz	
	200Hz	
Treble Freq	10KHz	Depending on the audio source, select the Treble Center Frequency to achieve the best Treble effect.
	12.5KHz	
	15KHz	
	17KHz	
Sub Filter	80Hz	Selecting a crossover frequency sets a cut-off frequency of the subwoofer's LPF (low-pass filter) and the "SMALL" speakers' HPF (high-pass filter). The Crossover frequency setting has no effect if the subwoofer is set to "Off" and any other speaker is set to "Large".
	120Hz	
	160Hz	
Navi-Mix	Off	When there is navigation audio output, the current audio will be switched automatically to navigation audio output.
	On	When there is navigation audio output, the current audio will be synchronized with navigation audio output.
Bass Q-Factor	1.0	When the Bass Center Frequency is selected, adjusting the Bass Q-Factor alters the sharpness of the Bass output.
	1.25	
	1.5	
	2.0	
TA	Off	Touch to deactivate TA
	On	Touch to activate TA. When a traffic announcement is received, the current playing source is overridden by the traffic announcement automatically
FM/AM Gain	-07 ~ +07	Adjust the FM/AM gain
DVD Gain	-07 ~ +07	Adjust the DVD gain
AUX IN Gain	-07 ~ +07	Adjust the AUX IN gain
NAVI Gain	-07 ~ +07	Adjust the NAVI gain

6.4 Screen Setup Menu

Accessing the Screen Setup Menu

Select the  button on the bottom of the screen, then Select the  button on the bottom of the screen to access the screen setup.



Selecting a Feature for Adjustment

Press the (▲/▼) buttons on the remote to select a feature to be adjusted.

Rotate **SMART DIAL** clockwise/counterclockwise to select a feature to be adjusted.

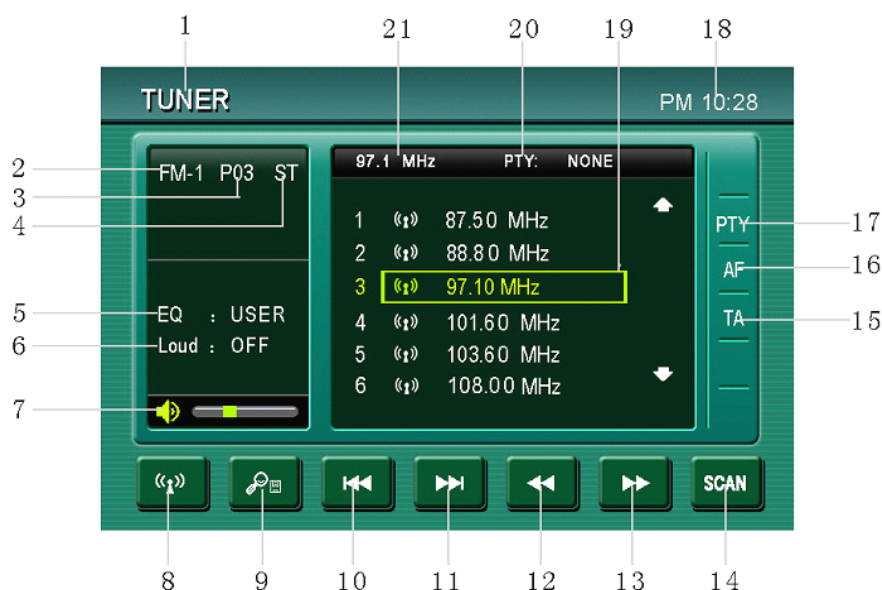
Directly touch the options on the screen to select a feature to be adjusted.

Adjusting a Feature

Setting	Options	Function
Brightness	00 to 20	Press the (◀▶) buttons on the remote or rotate the SMART DIAL clockwise/counterclockwise to adjust the brightness to the desired setting.
Screen Tilt	1 to 6	Press the (◀▶) buttons on the remote or touch the (1 to 6) number on the screen directly to adjust the tilt of the screen to the desired degree.
Screen Saver	On	Touch to activate/deactivate the Screen Saver.
	Off	
TS Calibrate	No	Touch "Yes" to enter the touch screen calibration mode.
	Yes	
Version		The version of this unit.

7 Tuner (FM/AM) Operation

7.1 Tuner TFT display



1. Current Source information, touch this area to return to **MAIN** menu.
2. Current Radio Band Indicator.
3. Current Preset Station playing Indicator.
4. Stereo Broadcast Indicator.
5. System EQ setting.
6. Loud Setting Indicator.
7. Volume Indicator.
8. : Touch to change among the following bands: FM-1, FM-2, FM-3, AM-1, AM-2.
9. : Touch to automatically scan and store stations in current radio band.
You also can press the **AS/PS** button on the front panel.
10. : Touch to seek down.
11. : Touch to seek up.
12. : Touch to tune down one step.
13. : Touch to tune up one step.
14. : Touch to activate/deactivate Scan Mode.
15. Touch to activate/deactivate TA (Traffic Announcement) function.
16. Touch to activate/deactivate AF (Alternative Frequency) function.
17. Touch to activate/deactivate PTY (Program Type) function.
18. Current time Indicator.
19. Preset Radio Stations: Touch to recall preset stations or touch and hold to store a station. (Total 6 stations per Band you can preset.)
20. Display Program Type.
21. Radio Frequency Indicator.

Note: This product features a tuner with RDS function, RDS (Radio Data System) is a system that transmits broadcast station information together with FM programs.

You get display of Program Service Name and PTY, tuning to stations broadcasting a desired PTY, automatic tuning to traffic information, and emergency broadcasts and radio text display. RDS service was not available in AM broadcasting. RDS service availability depends on the FM broadcasting provider.

7.2 Switch to Radio Tuner source

Press the **SRC** button on the front panel or press the **MODE** button on the remote control to switch to the Tuner source. You can also access the tuner mode from the MAIN menu directly.

7.3 Select FM/AM Band

Touch the  button on the screen or press the  button on the remote control to change among the following bands: FM-1、FM -2、FM-3、AM-1、AM-2.

Auto Store (AS) – Shown By Radio Frequency

Press the **AS/PS** button on the panel or press the  button on the screen to scan automatically and store strong radio stations in the 6 preset channels in the current band.

Auto Store (AS) – Shown By Radio Station Name

Touch [AF] in the screen, then press the **AS/PS** button on the panel or press the  button on the screen to scan automatically and store strong radio stations in the 6 preset channels in the current band.

Program Scan (PS)

1. Press and hold the **AS/PS** button on the panel to scan automatically the stations stored in the 6 preset channels in the current band.
2. Touch the  button on the screen to scan automatically all stations in the current band to preview station.
3. Press any button to stop scanning and listen to the selected station.

7.4 Auto Tuning

Press the button () on the remote control or touch the  button on the screen to seek the next available channel by decreasing the tuning frequency. Press the button again to stop searching.

Press the button () on the remote control or touch the  button on the screen to seek the next available channel by increasing the tuning frequency. Press the button again to stop searching.

7.5 Manual Tuning

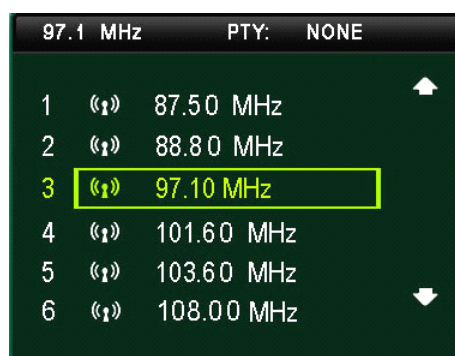
Touch the  or  to increase or decrease the tuning frequency one step.

7.6 Using Preset Stations

6 numbered preset buttons store and recall stations for each band. 6 stored stations (P01-P06) for the current band appear on the screen, touch the channel directly to select.

You can touch the arrow buttons   on the screen to select other stations.

Storing a Station



1. Select a band (if needed), then select a station.
2. Touch and hold an onscreen preset button for three seconds. The preset number appears at the top of the screen.

Recalling a Station

1. Select a band (if needed).
2. Touch an onscreen preset button to select the corresponding stored station.

7.7 Seek the PTY (Program Type)

Touch **PTY** in the screen to enter PTY menu, then touch to select one in the PTY menu, the unit will auto seek the next available PTY by increasing tuning frequency until the program type matches the PTY, if no matched was found, the tuner will return to original radio and "None" is displayed.

7.8 AF (Alternative Frequency/Auto Following) Function

Touch **AF** in the screen to activate/deactivate AF function. When AF is activated and a radio signal is too weak, the tuner automatically switches to the best alternative frequency.

Note: During auto switching radio frequency, some interference could be heard. Turn off AF function can cease this issue.

7.9 TA (Traffic Announcement) Function

Touch **TA** in the screen to activate/deactivate TA function. When TA is activated, the unit will auto seek an available TP or TA station. After the seeking, no matter if PTY was found, the tuner will auto seek each 1 minutes. When TA is activated and a traffic announcement is received, the current playing source is overridden by the traffic announcement automatically, if the tuner was last set to the FM band but not if it was last set to the AM band. When traffic announcement is over, the current playing source will be resumed.

Note: There are three methods to activate/deactivate TA function.

- Touch **TA** on the screen on Tuner mode.
- Press and hold the SCAN button on the front panel.
- Touch TA option directly on the screen on ASP SETUP mode, then select the OFF/ON option of submenu appeared in the second row.

8 DVD/CD Player Operation

8.1 Opening/Closing the TFT Video Screen

Opening the TFT Screen

To open the TFT video screen, press the **OPEN** button on the unit or press the **OPEN** button on the remote control.

Closing the TFT Screen

Press the **OPEN** button on the unit or press the **OPEN** button on the remote control again to close the TFT screen.

8.2 Insert/Eject Disc

Inserting a Disc

When inserting a DVD/CD disc, DVD/CD mode is entered and disc play begins.

Note: *You cannot insert a disc if there is already a disc in the unit or if the power is off.*

Ejecting a Disc

Press the button ▲ on the unit to eject the disc. The unit automatically reverts to tuner mode at the same time.

8.3 Reset the Loading Mechanism

If the disc loads abnormally or does not play properly, press and hold the button ▲ on the unit to reset the loading mechanism. The disc is ejected and normal operation resumes.

8.4 Accessing DVD/CD Mode

To switch to DVD/CD mode when a disc is already inserted, press the **SRC** button on the front panel or press the **MODE** button on the remote control until DVD/CD appears at the top of the screen.

9 DVD/CD/MP3/WMA/JPEG Operation

Instructions for Insert/Eject, Play/Pause, Stopping Playback, Track Selection, Fast Forward/Fast Reverse, Scan, and Random Play are the same for DVD/CD and MP3 operation. Please see the DVD/CD Player Operation section for information about these topics.

The file naming formats listed below are compatible with this unit:

- ISO 9660 – file name: 12 characters, file extension: 3 characters
- ISO 9660 – file name: 31 characters, file extension: 3 characters
- Joliet – 64 characters

If the file or folder name does not conform to ISO 9660 file system standards, it may not be displayed or played back correctly.

9.1 DVD player

After inserting a DVD disc , choose a DVD mode by mode button or press to the DVD button of the main menu ,then the monitor displays DVD programme .

- Touch the bottom of the touchscreen to show buttons of the touchscreen below while playing DVD .



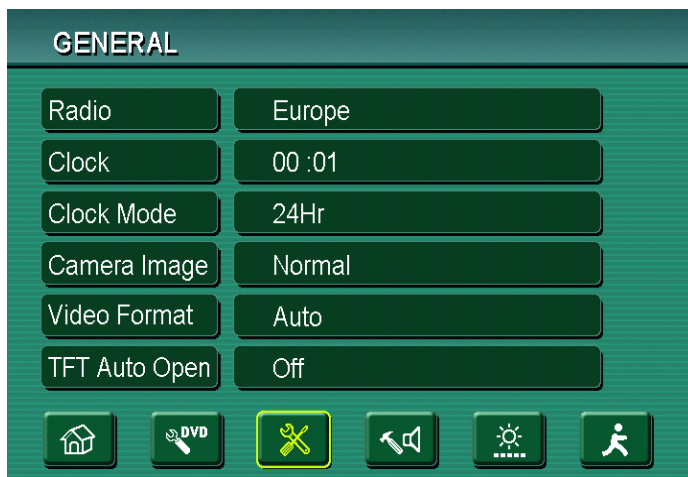
1. Touch to play/pause
2. Touch to stop: disc playback
3. Touch to be fast backward current track
4. Touch to be fast forward current track
5. Touch to activate/deactivate Repeat Single Mode
6. Touch to activate/deactivate Repeat of A to B
7. Touch to select mono/stereo audio mode
8. Touch to exit buttons of the touchscreen
9. Touch to access the subtitles if available. (Scroll through all languages to turn off subtitles.)

- Touch the left up corner of the screen while playing DVD to access the main menu
- Touch the right up corner of the screen while playing DVD to access the search menu below

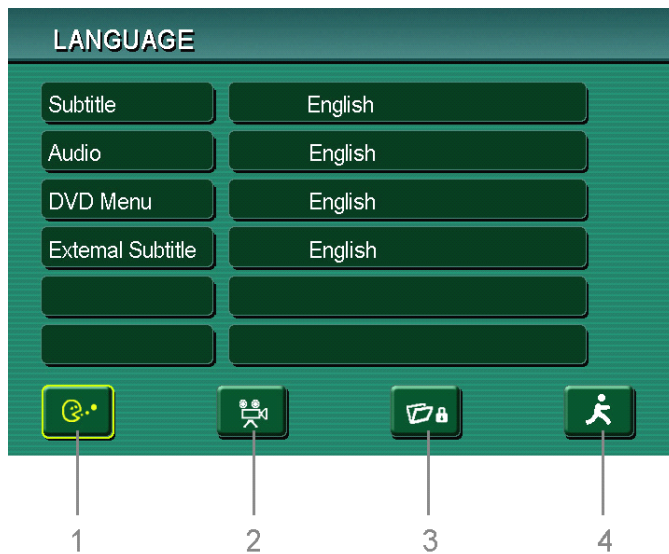


Touch to select the playing time and title/chapter then input the numeric buttons to the white underlines.

9.1.1 Select the  button on the main menu to access the General setup below.

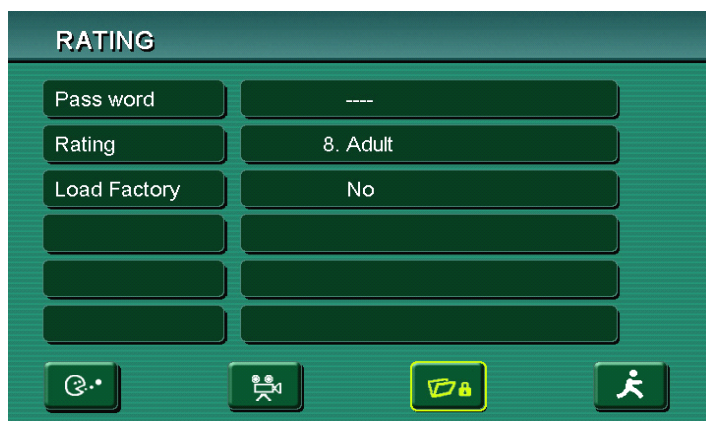


9.1.2 Touch the DVD button  of General setup menu to access the language menu below



1. Touch to set the languages
2. Touch to set the video mode
3. Touch to set passwords /rating / load factory functions
4. Touch to exit

9.1.3 Touch  to access setting password of Rating below .



The master password is 8888 and default password of the load factory is also 8888. After inputting the correct password, the “8.Adult” of the Rating is high lightened and then selects the menu by touching “8.Adult”. If forgetting the password that is set by user, the master password of 8888 can be used.

9.2 CD Player User Interface



1. Current source indicator, touch this area to access **MAIN** menu.
2. Disc title
3. Track title
4. Current time
5. : Touch to play/pause
6. : Touch to stop: disc playback
7. : Touch to turn to the previous page
8. : Touch to turn to the next page
9. : Touch to be fast backward current track
10. : Touch to be fast forward current track
11. : Touch to activate/deactivate Scan Mode
12. : Touch to activate/deactivate Repeat Single Mode
13. : Touch to activate/deactivate Random Mode
14. : Touch to display the numeric keypad on the screen, and then you can use the numeric keypad to access a track directly.
15. Current track and total number of tracks on disc
16. Elapsed playing time
17. User Defined Equalizer Lever
18. Loud Setting Indicator
19. Volume indicator

Playing CD Files

After inserting a CD disc, files will play in the sequence of the all directory. In playing back, you can press the numeric button on the remote control or touch a track on the onscreen directly to play.

Previous/Next Page

Touch the or on the screen to navigate through the pages/files.

Fast backward/fast forward

Touch the or on the screen to fast backward or fast forward play.

9.3 MP3/WMA Discs

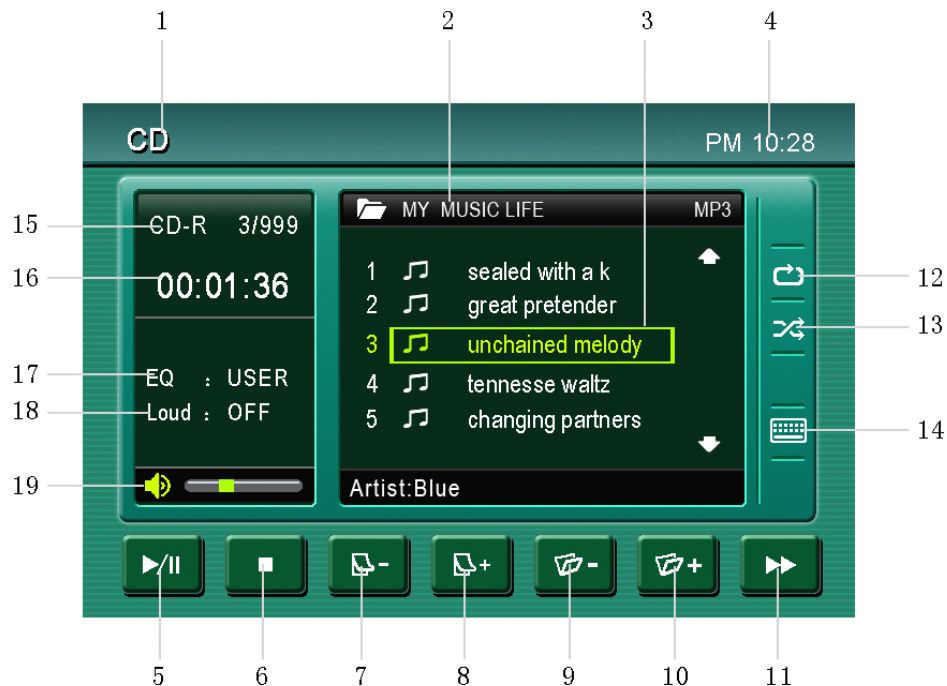
This player allows you to playback MP3 files recorded on CDROM, CD-R, CD-RW, CD+R/RW and CD-R/RW. For CD-RW discs, please make sure it is formatted using the full method and not the quick method to prevent illegal disc operation. Use the following settings when compressing audio data for your MP3 disc:

- Transfer Bit Rate: 320kbps
- Sampling Frequency: 48kHz

When recording MP3 up to the maximum disc capacity, disable additional writing.

For recording on an empty disc up to maximum disc capacity, use the "Disc at once" setting.

The touch keys for MP3/WMA CD/CD playback are described below.



1. Current source indicator, touch this area to access **MAIN** menu.
2. Disc title
3. Track title
4. Current time
5. : Touch to play/pause
6. : Touch to stop disc playback
7. : Touch to turn to the previous page
8. : Touch to turn to the next page
9. : Touch to display previous folder.
10. : Touch to display next folder
11. : Touch to fast forward current track
12. : Touch to activate/deactivate Repeat Single Mode
13. : Touch to activate/deactivate Random Mode
14. : Touch to display the numeric keypad on the screen, and then you can use the numeric keypad to access a track directly.
15. Current track and total number of tracks on disc
16. Elapsed playing time
17. User Defined Equalizer Lever

18. Loud Setting Indicator

19. Volume indicator

Playing MP3/WMA Files

After inserting a MP3/WMA disc, files will play in the sequence of the all directory.

In playing back, you can press the numeric button on the remote control or touch a track directly to play.

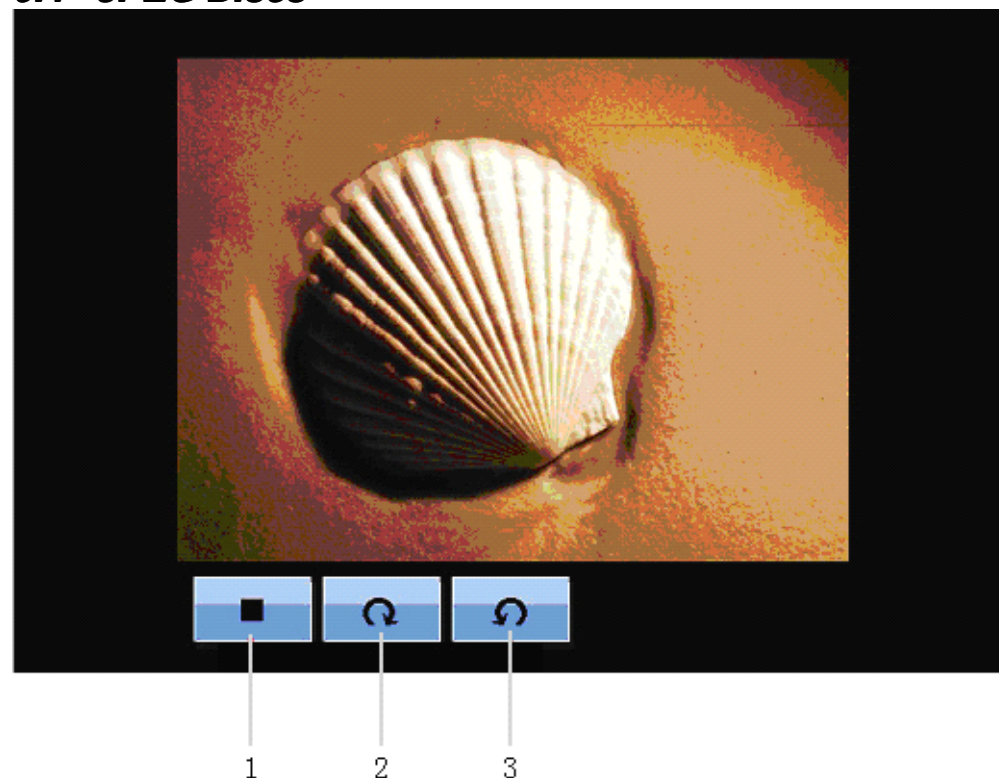
Change Directory

Touch the  or  on the screen to navigate through the directories/folders.

Previous/Next Page

Touch the  or  on the screen to navigate through the pages/files.

9.4 JPEG Discs



1. Stop playback and return to the picture list
2. Rotate picture clockwise 90°
3. Rotate picture anticlockwise 90°

10 Navigation Operation

10.1 Access the Navigation mode

1. Access the **MAIN** menu and select the **NAVI** button on the touch-screen to enter the Navigation Operation interface.
2. Press the **SRC** button on the front panel or press the **MODE** button on the remote control to switch the source to Navigation.

10.2 Navigation Operation

Please read the **Part 2 Navigation**

10.3 How to Listening to an Audio program while using/viewing the Navigation

You can listen to an audio program while using Navigation. To do so, do the following:

1. Select the audio source. The source can be the Tuner or the audio from the AUX input.
2. Touch the NAVI/AV button to select Navigation. Audio will continue to play while you are in the Navigation mode.
3. Navigation voice prompts will mute the audio source, give the instruction, and then return to the audio source. (When the setup of nav-mix is off)
4. To adjust a parameter of the audio source (i.e., select a different radio station), touch the NAVI/AV button. This will return you to the audio source screen. Make your adjustments, and then press the NAVI/AV button to return the Navigation function. Navigation will continue while you are in an audio source screen, and voice prompts will continue while you make adjustments.

11 Troubleshooting

Problem	Cause	Corrective Action
GENERAL		
Unit will not power on	Radio Fuse blown	Install new fuse with correct rating
	Car battery fuse blown	Install new fuse with correct rating
	Illegal operation	Press the RESET button located in the bottom right corner of the front panel
No/low audio output	Improper audio output connection	Check wiring and correct
	Volume set too low	Increase volume level
	Improper "MUTE" connection	Review wiring diagram and check "MUTE" connection
	Speakers damaged	Replace speakers
	Heavily biased volume balance	Adjust the channel balance to the center position
	Speaker wiring is in contact with metal part of car	Insulate all speaker wiring connections
Poor sound quality or distortion	Unauthorized disc is in use	Use original copy
	Speaker power rating not compatible with unit	Connect proper speakers
	Speaker is shorted	Check speaker connections
Tel-Mute malfunction	"MUTE" wire is grounded	Check that "MUTE" connection is not grounded and that it's properly insulated
Unit resets itself when engine is off	Incorrect connection between yellow memory wire and positive battery wire	Check wiring and correct
TFT MONITOR		
Monitor does not open automatically	TFT Auto Open is turned off	Turn TFT Auto Open on
No image	Incorrect connection to parking brake wire	Check wiring and correct
	PARKING is activated and parking brake is not engaged	Stop vehicle in safe place and apply parking brake
Prolonged image or improper height/width ratio display	Improper aspect ratio setup	Use correct aspect ratio setting
Monitor stops at incorrect position	Moving path is blocked	Press OPEN key to restart monitor movement
TUNER		
Weak station searching	Auto antenna is not fully extended	Connect the auto antenna control cable properly

	Auto antenna not properly connected	Connect the auto antenna control cable properly
	LOCAL function is activated	Turn LOCAL function off
DISC		
Cannot insert disc	Disc already inside unit	Eject current disc and insert new one
Disc does not play back	Disc is warped or scratched	Use disc in good condition
	Disc is dirty or wet	Clean disc with soft cloth
	Incompatible disc is used	Use compatible disc
	Disc rating exceeds Parental Lock rating limit	Change Parental Lock settings to lower restriction
	Disc region code is not compatible with unit	Use disc with proper region code
	Disc is inserted upside down	Insert disc with label side up
Image blurred, distorted, or dark	Disc is illegally copied	Use original disc
MP3		
Interruption occurred during playback	Disc is dirty or scratched	Clean disc or replace
	File is damaged/bad recording	Recreate disc with good files
Incorrect playback message displayed	Message is longer than LCD can display	

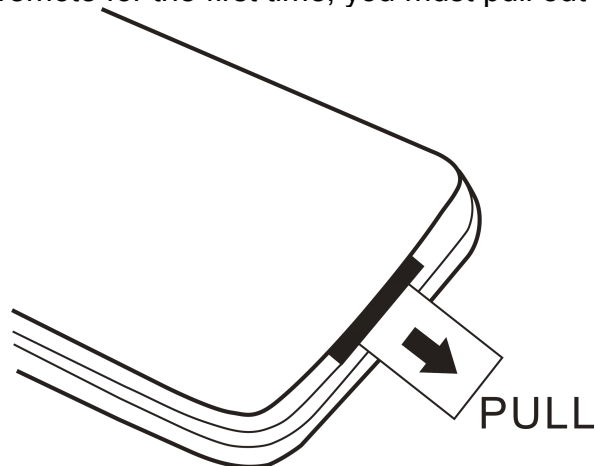
Error Messages

Message Displayed	Cause	Corrective Action
Loading	Disc is being read	
No Disc	Disc is dirty	Clean disc with soft cloth
	Disc is upside down	Insert disc with label side up
	Disc not present in loading compartment	Insert disc
Bad Disc	Disc is dirty	Clean disc with soft cloth
	Disc is upside down	Insert disc with label side up
	Disc is scratched and can't be used again	Change a new one
Unknown disc	Disc format is not compatible with this unit	
Region Error	DVD/CD is not compatible with region code of unit	
Error	illegal mechanism operation	Press EJECT key for 5 seconds to reset loading mechanism

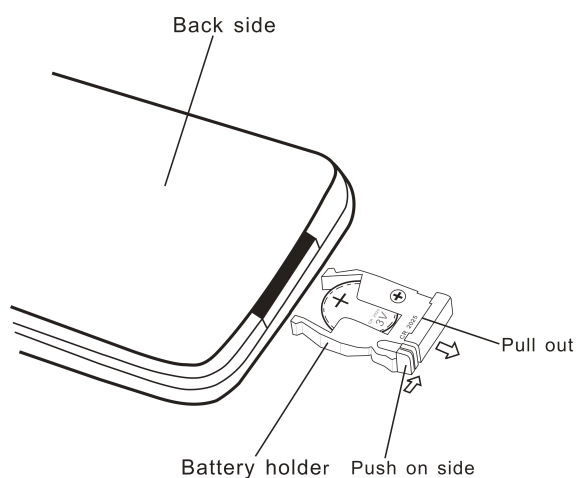
Remote control

Remote control does not function	Battery is covered with insulation tape	Pull out the insulation tape
	Battery depleted	Replace battery with new one
	Battery installed incorrectly	Remove battery and install correctly

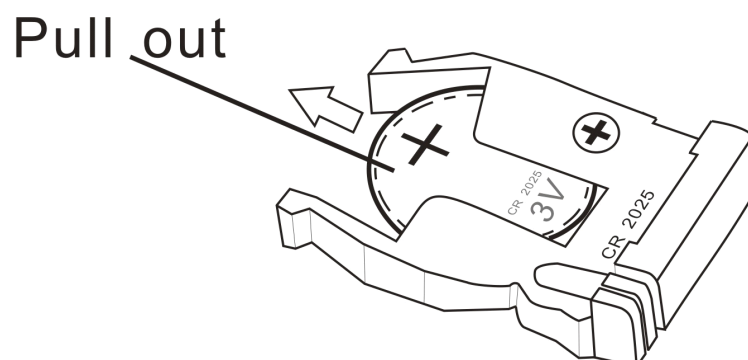
1. When using the remote for the first time, you must pull out the insulation tape.



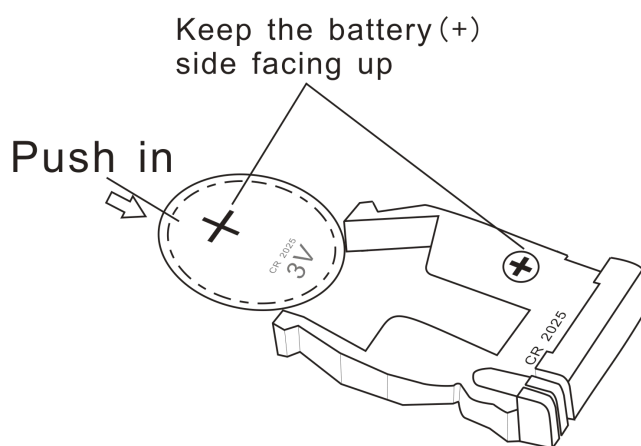
2. Remove the battery if the remote control is not used for a month or longer. Remove and dispose of the old battery immediately. Do not store the battery with metallic materials.
3. Inserting/Replacing the Battery:
Remove the battery holder



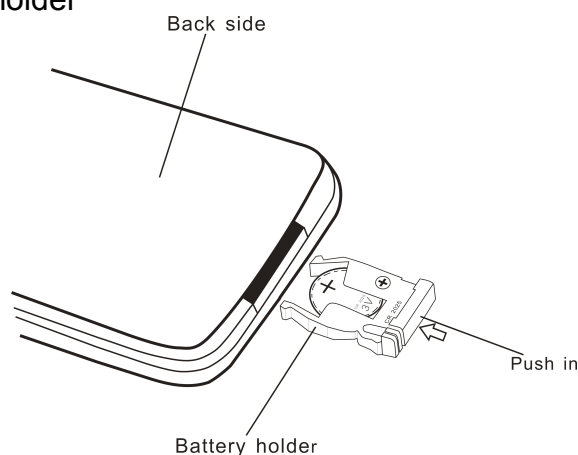
Remove the battery from the battery holder



Install the battery



Insert the battery holder



Note: Use only one CR2025(3V) lithium battery.
 Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
 Do not recharge, disassemble, heat or dispose of the battery in fire.
 Keep batteries away from children to avoid the risk of accident.

Suggestions

1. Only use a piece of clean silicone cloth and neutral detergent to clean the front panel or monitor. A rough cloth and non neutral detergent (such as alcohol) may result in scratching or discoloration.
2. Keep off water and other liquid things.
3. If the temperature inside the player gets too high, a protective circuit automatically stops playing the disc. And then, please wait for the unit to cool down before operating the player again.
4. Never insert anything other than a 5" (12 cm) compact disc into the player as the mechanism can be damaged by foreign objects.
5. Do not attempt to use a 3" (8 cm) CD-Single disc in this unit, either with or without an adaptor, as it will damage the player and disc. Such damages are not covered by the Warranty on this product.
6. When the vehicle warms up during cold weather or under damp conditions, condensation may appear on the LCD panel. If this occurs, the screen will not operate properly until the moisture has evaporated.
7. We suggest that you should clean the discs used in this unit more frequently than used in your home, because of the environmental conditions of the vehicle.

12 Specifications

Main Amplifier

Power Output: 20 watts X 4 channels into 4-ohms @ < 10% THD+N
Signal to Noise Ratio: 70dBA below reference. (Reference: 1 watt, 4-ohms)
MAX Power: 40 X 4 watts into 4-ohms, all channels driven
Frequency Response: 20Hz to 20 kHz, -3dB. Aux input used as source reference
Reference Supply Voltage: 14.4VDC

DVD/CD Player

Compatible formats: DVD CD-R, CD-RW, CD-DA, MP3, WMA, JPEG.
Signal to Noise Ratio: 85dBA
Dynamic Range: >95dB
Frequency Response: 20Hz to 20 kHz, -3dB
Channel Separation: > 60dB @ 1kHz
D/A Converter(s): 6-channel high performance 24-bit, 192 kHz, multi-bit Sigma Delta modulation. DAC supports sample rates from 8~192 kHz.
Mechanical anti vibration ability: 10~200Hz, X/Y/Z direction: 1.0G

FM Tuner Section

Tuning Range: 87.5MHz - 108MHz
Mono Sensitivity (-30dB): 10dBu
Quieting Sensitivity (-50dB): 15dBu
Alternate Channel Selectivity: 70dB
Signal to Noise Ratio @ 1kHz: 58dB
Image Rejection: 60dB
Stereo Separation @ 1kHz: 30dB
Frequency Response: 30Hz - 15kHz, -3dB

AM Tuner Section

Tuning Range: 522kHz - 1629kHz
Sensitivity (-20dB): 20dBu
Signal to Noise Ratio @ 1kHz: 50dB
Image Rejection: 60dB
Frequency Response: 50Hz - 2kHz, -3dB

Monitor Section

Screen Size: 7" (Measured diagonally).
Screen Type: TFT Liquid Crystal Display (LCD) active matrix
Response Time: 30mSec rise time, 50mSec fall time
Resolution, CD/Composite Video in: 336,960 sub pixels,
1440 (W) X 234 (H)
Viewing angle:
•45~60 degrees left or right
•20~30 degrees up
•40~60 degrees down

General

Auxiliary Input impedance: 10k
Power Supply: 10.5 to 16V DC, negative ground
Fuse: 10-amp, mini ATM type
DIN chassis dimensions: 178mm x (165+25)mm x50mm
* Specifications subject to change without notice.

Part 2 Navigation

NÂVsure

UK English

N420i (V02)

1 Warnings and safety information

Navsure is a navigation system that helps you find your way to your selected destination. It will determine your exact location with the help of the built-in GPS device. The position information obtained from the GPS receiver will not be transmitted anywhere, so others will not be able to track you by the help of this program.

If you are the driver of the vehicle, we recommend that you operate Navsure before beginning your journey. The driver's attention should always be on the road. Plan your route before departure and pull over if you need to change route parameters. Navsure has a built-in (optional) Safety Mode that will prevent you from using the screen functions if your car is in motion. Unless a passenger will be the only one to operate Navsure, we strongly encourage you to turn on the Safety Mode.

It is also important that you look at the display only if it is absolutely safe to do so.

You should always observe traffic signs and road geometry before you obey any instruction from Navsure. If you need to deviate from the recommended direction, Navsure will suggest a modified route according to the new situation.

Never place the device where it can obstruct the view of the driver, is within the deployment zone of airbags, or where it can cause injuries in case of an accident.

When Selecting Road speed limit display, please be aware that local limits and regulations are subject to constant change and therefore, this function is only intended as a guide. Please abide by locally displayed speed limits.

2 General information

Navsure is a navigation system optimised for in-car use. It provides door-to-door navigation for both single and multi-point routes using adaptable route parameters. Navsure is capable of planning routes throughout the whole installed map set. Unlike some other products, Navsure does not require that you change maps or switch to a poorly detailed general map to navigate between map segments or countries. You always have complete freedom to go wherever you wish. Just select your destination and go.

You do not need a stylus to use Navsure. All screen buttons and controls are designed so that you can operate them with your fingertips.

You can access all functions of the program by using hardware and screen buttons. With the help of these buttons you can travel through all the screens of the program. Most of the screens (especially menu functions and settings) can be accessed from several other screens, minimising the number of actions needed to reach the desired function.

When using Navsure, you do not need to 'double tap' or 'tap & hold' the touch screen as these functions cannot be used reliably in a moving vehicle. A single tap triggers most of the screen controls. The only exceptions are 'drag & drop' for moving the map, or scaling it in Map mode (Page 51).

Most of the screens have a Return button  in the top left corner. This arrow returns to the previous screen or directly to one of the map screens.

Settings screens also have a Help button  in the top right corner. This will show a detailed description of the current settings screen.

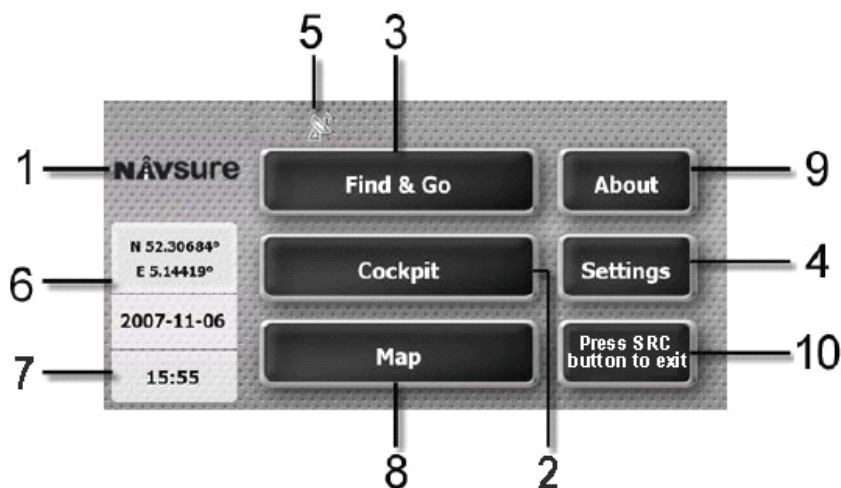
3 Discovering the program through the screens

The best way to discover Navsure is to explore each screen in detail, and to find out how to move from one to another. Read this chapter for a guided tour.

3.1 Main menu

Navsure starts by displaying the Main menu. This is the root of the screen hierarchy, but you need to return here very rarely while using the program. Screens are also accessible from each other to reduce the number of actions needed to initiate a function or change a setting.

Most parts of the program are directly accessible from here by using the buttons described below.



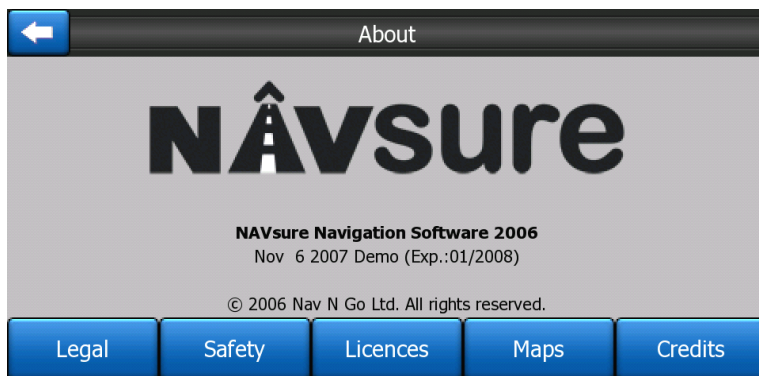
No.	Content
1	Navsure logo
2	Button to open Cockpit screen
3	Button to open Find menu
4	Button to open Settings
5	Button that displays GPS Status and opens the GPS Data screen
6	Current position
7	Current date and time
8	Button to open Map screen
9	Button to open About screen

No.	Content
-----	---------

10	Press SRC button to exit Navsure(navigation stops)
----	--

3.2 About screen

Tap About on the Main menu screen to open this screen. The About screen is not used in normal navigation. It is there to inform you about the map licenses you have, the creators of Navsure and the legal aspects of using the program.



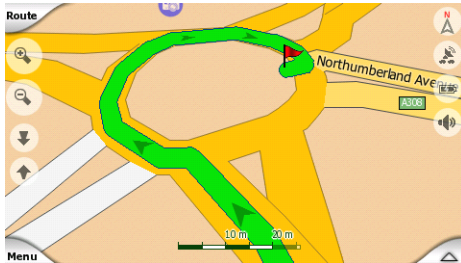
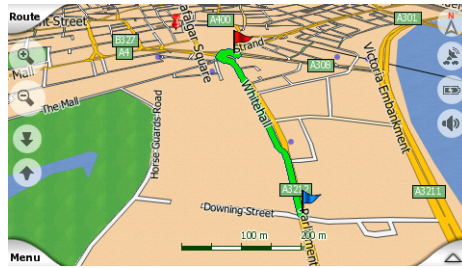
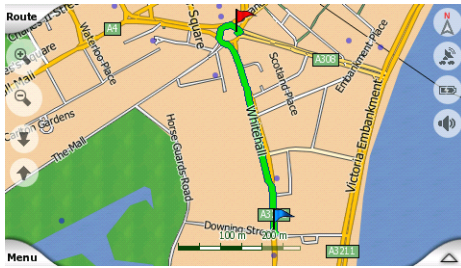
3.3 The map

The most important and most frequently used screens of Navsure are the two screens with the map (Map screen and Cockpit screen). They are similar in look and in possible controls but are optimised for different uses. The map they display is common. The elements of the map are described here. For the controls and special functions of the two map screens see Page 47.

The current version of Navsure is primarily intended for land navigation. That is why maps in Navsure look similar to paper roadmaps (when using daytime colours and 2D map mode). However, Navsure provides much more than regular paper maps can. The look and the contents can be changed.

3.3.1 2D and 3D map views

Besides the classical top down view of the map (called 2D mode), you have the possibility to tilt the map to have a perspective view (3D mode) that gives a view similar to that seen through the windscreen with the possibility to see far ahead.



It is easy to change between 2D and 3D modes. You have two options. You can use the Tilt up and down buttons (Page 49) to tilt the map seamlessly between 2D and all 3D angles, or you can use the switch in the Quick menu (Page 57) to quickly switch between the two modes.

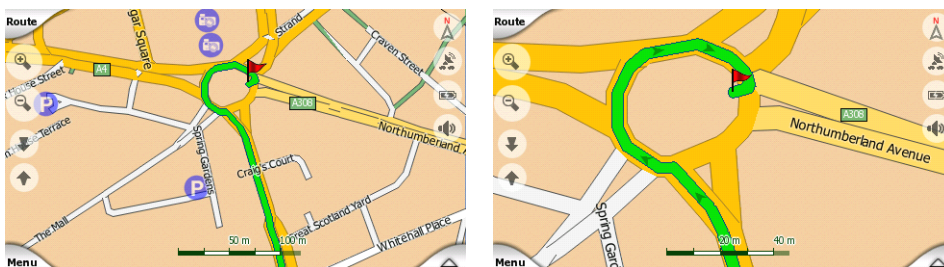
Note: You may find that 2D mode is more useful in North-up Map mode when looking for a certain part of the map or an object to select as destination. On the other hand, 3D mode in Track-up Cockpit mode with Smart Zoom makes navigation very comfortable. The description of these modes will come later in this manual.

Note: 3D view is only useful for navigation. As you zoom out, the view angle will automatically be raised. Finally 2D view will be reached. When you zoom back in, 3D view will gradually return.

Note: Using the Advanced settings, you can force Cockpit mode to always start in 3D Track-up view (Page 74). You can still rotate and tilt the maps in either mode, but the next time you enter this screen, the preset look will reappear. Similarly you can force Map mode to always start in 2D North-up view.

3.3.2 Zoom levels

Navsure uses high quality vector maps that let you see the map at various zoom levels, always with optimised content (the density of the map details can be independently set for Map and Cockpit screens in Map settings). Street names and other text objects are always displayed with the same font size, never upside down, and you only see as many streets and objects as needed to find your way around the map. Zoom in and out to see how the map changes in either the 2D or 3D view.



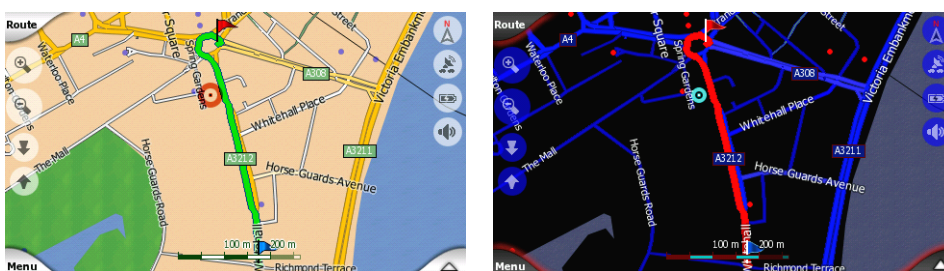
Changing the scale of the map is very easy. You can drag and stretch the scale (Page 51) at the bottom of the Map screen, or use the zoom icons (Page 49) on both Map and Cockpit screens.

Note: If you need to zoom out briefly to locate your position on the map, use the Overview mode instead of zooming out and back in. The Overview mode is a 2D North-up view that can be started by tapping the compass button on the right (Page 51).

Note: Navsure has a special Smart Zoom function for navigation that automatically rotates, scales and tilts the map in 3D map mode to always give you the optimal view in your current situation. 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 flat in order to let you see the road in front of you.

3.3.3 Daylight and night colour schemes

The different colour schemes let you adjust Navsure to the brightness of the environment. Use the daylight and night colour schemes accordingly. Daylight colours are similar to paper roadmaps, while the night colour schemes use dark tints for large objects to keep the average brightness of the screen low, with carefully selected colours to still keep you informed about all the necessary information on the screen.



You can change between day and night views manually in the Quick Menu (Page 58) or let Navsure do it automatically (Page 67) for you.

Tip: There are several daytime and night colour schemes included with Navsure. To select the one that suits your needs the best, make your selection in Settings (Page 69).

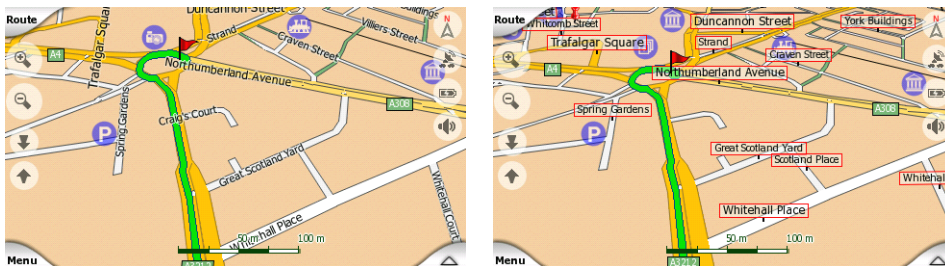
Tip: To further enhance the effect of the night colour scheme, you can instruct Navsure to decrease the display backlight when the night colours are used. Set the desired backlight levels for both daylight and night modes.

Note: The colours mentioned and screenshots included in this manual refer to the default daytime and night colour schemes. They may not look the same in the schemes you have chosen.

3.3.4 Streets and roads

The similarity of Navsure to paper roadmaps is also convenient when it comes to streets, the most important elements of the map concerning navigation. Navsure uses similar colour codes to those you are accustomed to, and the width of the streets also refers to their importance, so it will not be difficult to tell a highway from a small street.

Streets and roads have names or numbers for identification. Of course, this information can be displayed on the map. Navsure uses two different ways to show street labels. The conventional way is the same as a roadmap – it displays the name of the street aligned with the street. The alternative is a kind of virtual signpost stuck into the street itself.



You need not choose between the two modes. Navsure will use the one best for the current tilt and zoom level. Zoom in to have only a few streets on the map, and start tilting up and down to see how Navsure switches between the two modes in an instant.

Note: The automatic switching is on even when using Smart Zoom. At first you may find it odd, but later you will discover how it adjusts the displayed information to the current view of the map. It is important, as the driver must be able to read the map at a glance.

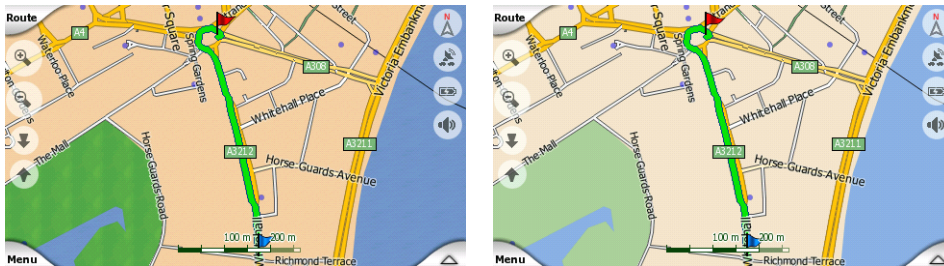
Tip: If you do not want to be bothered by street names during navigation, turn them off in Map Options (Page 69).

Tip: Major roads usually have alternative names (numbering) besides the primary name. You can choose whether to display these alternative names or not. You can set this in Map Options (Page 69).

3.3.5 Other objects

To help orientate you, the map also contains objects that have no other navigating function than to help you recognise your location on the map. These are surface-waters, large buildings, forests, etc.

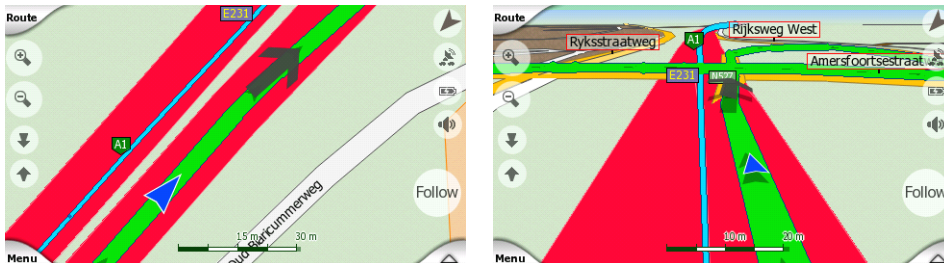
Tip: These objects are normally displayed using textured polygons that look natural to the eye. You may wish to switch the textured display off (Page 69) to free some of the resources of your PNA by replacing textures with plain coloured surfaces.



3.3.6 Current position and Lock-on-Road

When your GPS position is available, a blue arrow (yellow when using night colours) shows your location on the map.

The direction of the arrow represents your heading. The arrow is sized and vertically rotated with the zoom and tilt levels to always look realistic.



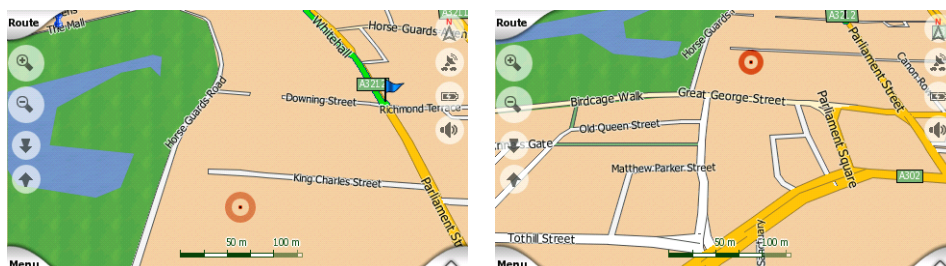
Navsure has a built-in Lock-on-Road feature that always puts the position arrow on the road, on the axis of the street in case of one-way streets, or on the side of the road where you drive (e.g. on the right in Germany and on the left in the U.K.) on two-way roads.

The location received from the GPS receiver is shown as a blue dot on the map. This can help you locate your position if the GPS accuracy is poor, and the Lock-on-Road system puts you on the wrong street. It is also the location saved in the track log (Page 59).

When the GPS position is lost, the arrow turns grey, but the journey continues on the recommended route for a short period of time with the speed last detected before the GPS position was lost. When the next route event is reached, or after 40 seconds, the arrow stops, and remains grey until GPS reception returns. This way short tunnels can be crossed without losing the position.

3.3.7 Selected map point, also known as the Cursor

If you tap the map somewhere or select a specific item in Find, it will become the selected point on the map, marked with a small red dot and permanently radiating red circles to make it conspicuous at all zoom levels, even when it is in the background of a 3D map view. You can use this point as starting point, via point, or destination of your route, you can search for a POI near to it, mark it with a drawing-pin, or save it as a POI. The cursor, when visible, is also the reference point for map scaling.



Note: When your GPS position is available, and Lock-to-Position (Page 50) is active, the cursor is the current GPS position, the blue arrow. When you select another point by tapping the map, or using the Find menu, the new Cursor is shown on the display with the red dot and the radiating red circles.

3.3.8 Marked map points (Pin)

The Cursor can be marked with a Pin. Pins are shown as being stuck in the map. A Pin is visible at all zoom levels and remains in its position until you unpin it, or delete all Pins in Advanced settings.

The colour of the Pin is automatically selected by Navsure. Different colours help you identify a Pin in the History list later. There they are shown together with their address and GPS Coordinates.

Tip: There is a quick way to save the current GPS position as a Pin. Press the Record button (hardware button with an audio cassette icon on it) to save the Pin instantly..

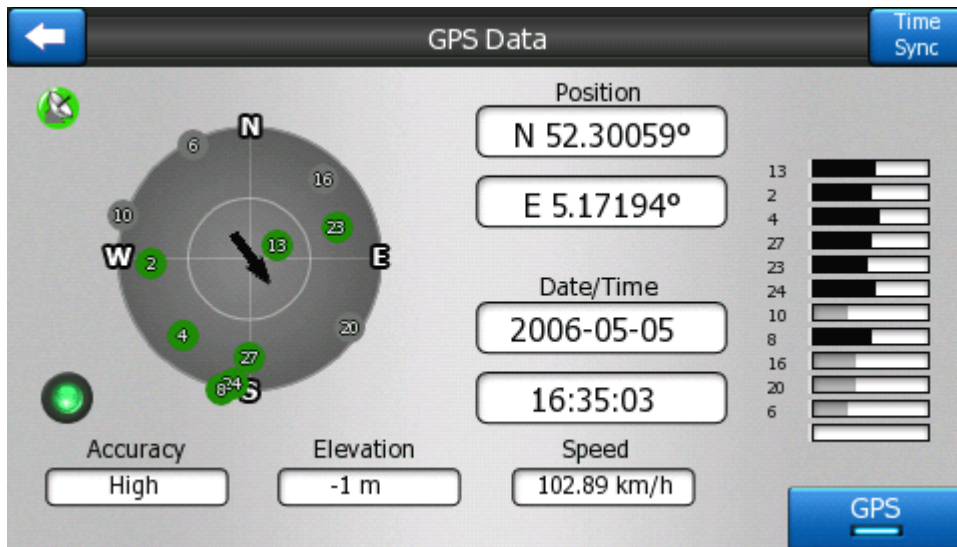
Tip: A quick way to tell the coordinates of a location you found on the map is to Pin it, and then look for the coordinates in the History list. This way you also save the coordinates with the Pin for later reference. If you do not need the coordinates later, just select the point and start Find Coordinates.

3.4 GPS Data screen

Tap the small satellite dish icon on the Main menu, Map or Cockpit screen to open this window.

The GPS Data screen is a collection of information received from the GPS device and it also serves as the entry point to the following screens:

- Time Sync.



3.4.1 GPS data displayed

The virtual sky on the left represents the currently 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 grey satellites. Signals from the grey satellites are only received, while green ones are used by the GPS to calculate your current location. On the right you can see the satellite signal strength bars. Grey bars are for the grey and black bars are for the green satellites. To identify satellites use their numbers also shown in the virtual sky. The more satellites your GPS tracks (the green ones), the better your calculated position will be.

Additional pieces of information on this screen are: current position in latitude/longitude format, elevation, speed, date, time and calculated accuracy.

Note: Accuracy can be affected by several factors the GPS cannot take into account. Use this accuracy information only as estimation.

There are two icons on the left to show the status of the GPS connection and the quality of reception.

3.4.2 GPS connection indicator

In the middle to the left there is a lamp similar to the ones used for switches. This one has more colours and represents more values:

-  a fast blinking green lamp means that there is communication with the GPS and data is being received,

-  other colours may not appear with a built-in GPS. Should any of these appear, this means a faulty operation of your device.

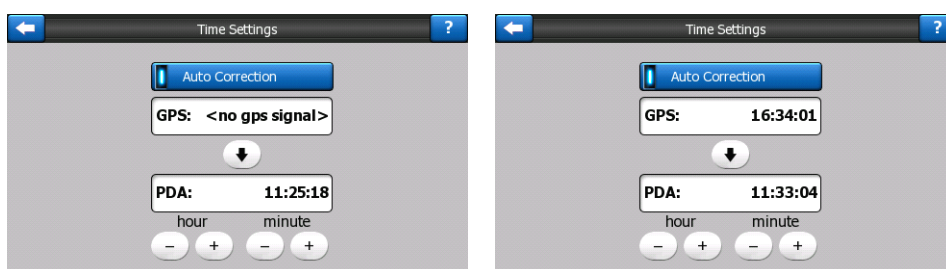
3.4.3 GPS data quality indicator

In the top left corner there is a satellite dish to show the quality of the GPS position. Different colours represent different signal quality:

-  black with a red cross means there is no connection with the GPS device. This should never be the case if your device has a built-in GPS.
-  red means the GPS is connected but no GPS position is available,
-  yellow means 2D reception. A GPS position has been acquired, Navsure is ready for navigation, but the GPS is using enough satellites for calculating the horizontal position only. Elevation data is not provided, and the position error may be significant.
-  green means 3D reception. The GPS receiver has enough satellites to calculate altitude. Position is generally correct (yet it can still be inaccurate due to different environmental factors). Navsure is ready for navigation.

3.4.4 Time synchronization

In the top right corner of the screen you have another button that leads to a new screen where you can synchronize the clock of your device to the very accurate time provided by the connected GPS.



Turn on the Auto Correction switch to let Navsure frequently check and correct the internal clock of the device with the GPS time.

Below that button you will see the current values of the GPS and the device clocks. You can check here whether any correction is needed. Tap the  button to manually synchronize the time.

Below the device time you have hour and minute controls to manually correct the time with or without a valid GPS time. It also gives you the chance to correct the time

after synchronization if your device does not support time zones or daylight saving time.

3.5 Screens with map

Having explained the contents of the map, the description of the other parts of the map screens follows. There are two map screens: the Map screen and the Cockpit screen. The way they show the map is the same but their look and controls are optimised for different purposes.

The Map screen is to be used mainly without a GPS, to browse the map, create user POI items, or to plan your route based on map points. The Map screen is designed to give you the maximum map area. This screen is usually used in 2D North-up mode.

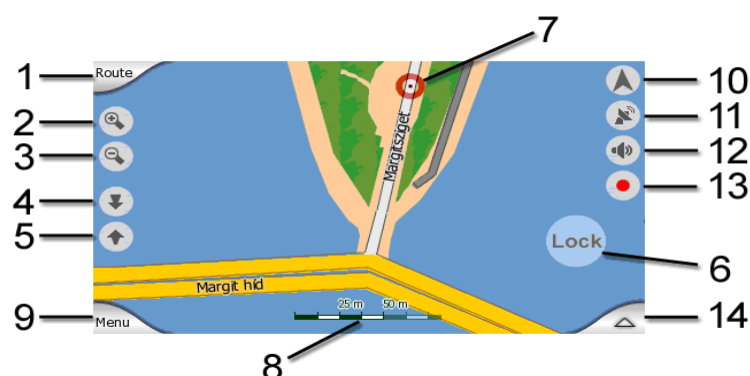
You can set Navsure so it always opens the Map screen in 2D North-up mode (Page 74).

The Cockpit screen is for driving purposes. Besides showing the map, it contains some additional travel information if you are just cruising (speed, current street you are driving in, speed limit for the current street), and some more route data if you are navigating (e.g. next street in your route, distance to travel, type of the next route event). This screen is typically used in 3D Track-up mode.

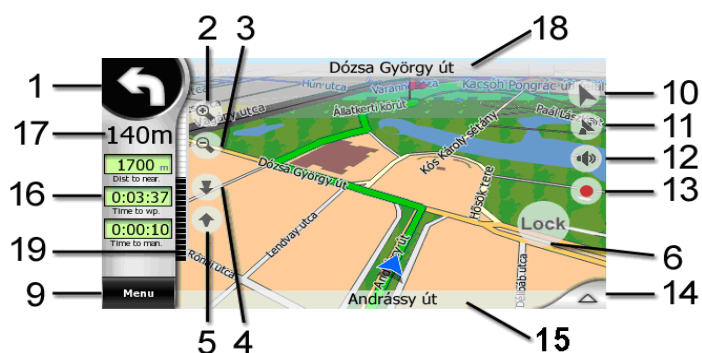
You can make Navsure always open the Cockpit screen in 3D Track-up mode (Page 74).

There are several controls that function in a similar fashion on the two screens. They are described on the following pages.

Map screen contents:



Cockpit screen contents:



No.	Display	Control
1	(Cockpit only) Turn preview*	Opens Route menu*
2	n/a	Zooms in (optional)
3	n/a	Zooms out (optional)
4	n/a	Tilts down (optional)
5	n/a	Tilts up (optional)
6	Indicates that Lock to GPS position and heading is inactive	Re-enables Lock-to-Position / Smart Zoom
7	Selected map point (Cursor)	Opens Popup Info and Cursor menu
8	(Map only) Map scale	Zooms in/out by dragging
9	n/a	Menu (Find, Quick, Route, Main)
10	Map orientation and Overview	Switches North-up, Track-up and Overview
11	GPS position quality	Opens GPS Data screen
12	Sound on or muted	Enables/disables muting
13	Track Log recording or playback	Opens Track Logs screen
14	n/a	Opens Cursor menu
15	(Cockpit only) Current street	Opens Route Information screen
16	(Cockpit only) Travel and Route data**	Opens Route Information screen
17	(Cockpit only) Distance to next turn***	n/a
18	(Cockpit only) Next street***	n/a
19	(Cockpit only) Approaching next turn****	n/a

** On Map screen only when a route is active*

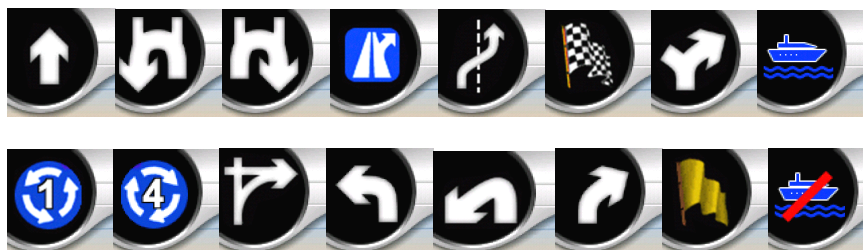
*** Contents differ when a route is active*

**** Appears only when a route is active*

***** Appears only when a route is active and the next turn is near*

3.5.1 Turn preview (No. 1)

On the Cockpit screen this field shows a graphic illustration of the next manoeuvre. For example when you approach a turn, an arrow will show whether it is a slight, normal or sharp turn. When showing a roundabout, the number of the exit is also given in the picture.



This field also serves as a button. Tap it to get to the Route menu (Page 60). The Map screen will show a button called Route here if there is an active route. This also leads to the Route menu.

3.5.2 Zoom in and out (No. 2 & 3)

These semi-transparent buttons are only displayed if "Zoom & Tilt" is enabled in the Quick menu (Page 58).



Zoom will change the scale of the map. Zoom out shows a larger part of the map, while Zoom in shows a smaller part of the map in more detail.

The automatic Smart Zoom function will do the necessary zooming for you when navigating (zooms out if the next turn is at a distance to let you see far ahead and zooms in when approaching a turn to give you a better view of the upcoming manoeuvre). If you manually change the zoom level, Smart Zoom will no longer scale the map by itself (automatic tilting and rotating remains active).

You need to press Enter, or tap the Follow button (Page 50) to return the zoom control to Smart Zoom. You can also set Navsure to do this automatically after a few seconds in case of the Cockpit screen.

3.5.3 Tilt up and down (No. 4 & 5)

These semi-transparent buttons are only displayed if "Zoom & Tilt" is enabled in the Quick menu (Page 58).



This function modifies the vertical viewing angle of the map in 3D mode. You can change the angle in a wide range starting from a top down view (2D view is seamlessly integrated) all the way to a flat view that lets you see far ahead.

The automatic Smart Zoom function will do the necessary tilting for you when navigating (gives a flat view if the next turn is at a distance to let you see far ahead and raises the angle when approaching a turn to give you a better view of the upcoming manoeuvre). If you manually change the view angle, Smart Zoom will no longer tilt the map by itself (automatic zooming and rotating remains active).

You need to tap the Follow button (Page 50) to return the tilt control to Smart Zoom. You can also set Navsure to do this automatically after a few seconds. Follow mode - lock to GPS position and heading (No. 6)

This semi-transparent icon is displayed if GPS position is available, and the map has been moved. It also appears when you scale or tilt the map while Smart Zoom is enabled.

3.5.4 Follow mode - lock to GPS position and heading (No. 6)

This semi-transparent icon is displayed if GPS position is available, and the map has been moved or rotated. It also appears when you scale or tilt the map while Smart Zoom is enabled.



Normally Navsure positions the map to keep the GPS position visible somewhere on the map (when North-up orientation is selected), or always at the bottom centre of the map (when Track-up orientation is selected).

If you manually move the map, it will freeze the map in the new position. To return to the GPS position, use this Follow button.

When Smart Zoom is enabled, scaling or tilting the map also stops the automatic zooming or automatic tilting respectively. To reactivate Smart Zoom, tap this button.

Tip: In Advanced settings you can set a delay time after which Navsure pushes the Follow button for you on the Cockpit screen automatically. This can be turned on for re-enabling both Lock-to-Position and Smart Zoom.

3.5.5 Cursor (No. 7)

As described earlier (Page 44), if you tap the map somewhere or select one specific item in Find, it will become the selected point on the map, marked with a small red dot and radiating red circles to make it conspicuous. You can use this point as starting point, via point or destination for your route, you can search for a POI near it, mark it with a pin, or save it as a POI.

Note: When GPS position is available, the Follow button will appear indicating that you have disabled Lock-to-Position. Tapping the Follow button will re-enable the position lock and move the cursor back to the current GPS position. The same happens when Navsure restores Lock-to-Position automatically on the Cockpit screen, if it is set in Advanced setting.

3.5.6 Map scale (No. 8)

The scale indicator is only available on the Map screen. In 2D map view it represents the scale of the map. In 3D view it is the scale of the nearest part of the map only.



You can use it in both 2D and 3D modes to scale the map. Drag and pull it right to zoom in, or left to zoom out.

3.5.7 Menu (No. 9)

This button opens the Menu with the Find engine, the Quick menu, the Route menu and the exit button that takes you to the Main menu screen. The Menu will be described in detail later: Page 57.

3.5.8 Map orientation and Overview (No. 10)

You can view the map screens in three different presentation modes. This switch will cycle through them in the following order.

The usual map orientation for navigation is Track-up. It means Navsure rotates the map during navigation to always face the direction of your travel. In this mode an arrow (compass) points towards North.



Tap this icon to switch to North-up mode. Now the map is fixed to keep facing North. The icon changes to show the new rotation mode.



Tap the icon again to enter Overview mode. This mode looks similar to the North-up mode with one difference: the zoom level in this mode has a fixed default to give you a better look of where you are on the map. You can change the zoom level at any time, this will not cause the Follow button to appear, but when entering Overview mode later, the default zoom level will be restored.

The arrow representing your position will be fixed in the middle of the screen. When you move the map in Overview mode, the Follow button will appear, and when pushed, it will move the map to have your current position in the middle of the map again.

You cannot rotate the map in Overview mode. This mode is strictly north-up.

You can set up Navsure so that it will switch to Overview mode during navigation when the next turn is far away. You can specify this distance and the fixed zoom level of Overview in Advanced settings .

An aeroplane icon indicates Overview mode.



Tap the icon again to return to Track-up (automatic rotation) mode.

3.5.9 GPS position quality (No. 11)

Similarly to the icon found on the GPS Data screen (Page 46), the map screens also inform you about the GPS signal:

-  The black satellite dish with the red exclamation mark shows there is no connection with the GPS receiver. GPS navigation is not possible. Devices with a built-in GPS receiver are permanently connected, so this icon may not appear under normal circumstances.
-  Red shows there is a connection, but the signal is too weak to give a position. GPS navigation is not possible.
-  Black shows there is a GPS position, and navigation is possible. When only one arc is shown, the position is 2D (no altitude available), and position error may be significant, yet Navsure is ready to navigate.

-  A black dish and two arcs represent a 3D GPS position. Navsure is ready to navigate.

3.5.10 Sound muting (No. 12)

By tapping this button you can quickly mute all sounds of the device. This will not modify the volume level and the enabled or disabled status of the voice guidance or the key sounds, just mutes the sound output. When muting is enabled, the speaker icon is crossed out.



Tap again to re-enable sounds.



Note: Sound can be muted in Sound settings, too. There you have a Master switch that works together with the switch described above. There is also a Master slider on that screen. That you can use to fully turn down the volume of the device. Setting the volume low is different from muting, therefore it will not show up on the mute indicator.

3.5.11 Track Log recording/playback indicator (No. 13)

When a track log is being recorded, a red icon is displayed on the map screens. This icon also functions as a button leading to the Track Log screen (Page 59) where you can stop the recording or make the track log visible on the map.



During track log playback a green icon will blink. Tapping this icon (in fact, tapping the screen anywhere) stops the simulation.



3.5.12 Cursor menu (No. 14)

The Cursor is the selected point on the map (marked by a red dot and radiating red circles around it), or the current GPS position when it is available and Lock-to-Position is enabled. When you tap the screen to place the Cursor, the Cursor menu

pops up automatically to give you the list of possible functions you can use the Cursor for. At the same time Popup Info (street name, house number and the list of POIs nearby) appears near the selected map point if Popup Info is enabled in the Quick menu (Page 57).

If you do not use the Cursor menu in a few seconds, it will automatically vanish back to the bottom of the screen, and Popup Info disappears, too. You can have them reappear by reopening the Cursor menu using the arrow in the bottom right corner. When you open the menu manually, it will stay on until you close it or switch to another screen.

Tip: If you want to see the map around the Cursor, close the Cursor menu and reopen it. When this menu is opened manually, the map is always moved to have the cursor in the centre.



The content of the Cursor menu depends on the screen (Map or Cockpit) and it is slightly different if there is an active route already planned. You have the following options:

- **Start:** use the Cursor as the departure point for your route. This menu point is available only in Map mode and when there is no active route. In Cockpit mode the departure point of the route is always the GPS position or if it is not available, the last known GPS position.
- **Route To:** use the Cursor as the destination of your route. This button is to start a new route. The previous route (if it exists) will be deleted and replaced. If a multi-point route is active, Navsure will ask you whether you really want to delete it together with all its via points.
- **Add Via:** by inserting the selected map point as a via, you instruct Navsure to cross this location before the destination of the route. This is the way to build a multi-point route in reverse order (when you wish to insert a stopover 'go to A but first get some fuel at B' or want to influence the direction of the route). This menu point works only if a route is already active.
- **Remove Via:** removes the 'via point' near or at the Cursor. The route will be recalculated immediately excluding the deleted point. This menu point replaces Add Via and is available only if the Cursor is near or at a via point.
- **Continue:** add a new destination to be reached after the previous destination. The new destination replaces the old one, which is now demoted to a via point. This is the way to build your multi-point route in straight order (when you wish to visit several destinations 'go to A then to B'). This menu point is available only if a route is already active.

- **Pin:** push a coloured pin in the map at the selected point for later use. This pin is visible at all zoom levels and also appears in the History list together with its exact position. The colour of the pin is automatically selected by Navsure.
- **Unpin:** remove the pin near or at the Cursor. This menu point replaces Pin and is available only if the selected point is near or at a pin.
- **POI:** opens the list of POIs near the selected point. These are the POIs shown in the Popup Info window. This menu point is only available on the Map screen. If you want to add a new POI at the cursor, you can do so by tapping Add POI in the bottom left corner. You can also add a new road safety camera if you tap Add Cam, and set the parameters (type, direction, and speed). If a camera already exists near the cursor, this button is inactive, and you can change the parameters of the camera by tapping it in the list.

3.5.13 Current street (No. 15)

This field of the Cockpit screen shows the name or number (as available) of the current street or road you are driving on.

***Tip:** Some roads have an alternative name (or number). This is normally shown together with the primary name in this field. You can hide these alternative names in Map settings (Page 69).*

3.5.14 Travel and Route data (No. 16)

The contents of these three fields are different when cruising (without an active route) or navigating (following an active route).

While cruising, the fields show the present speed, the current speed limit and the time of day.

While navigating a route, these fields show the estimated time needed to reach the destination (ETE), the distance to destination, and the estimated arrival time at the destination (ETA) by default.

You can choose what to display in these three fields during navigation, by going to Advanced settings / Display Options (Page 75). See the following list for your options.

The only restriction is that you cannot select a value that already appears in another field. The possible field contents are:

- Distance to destination (default value for the left field)
- Time to destination (estimated time en route, default value for the middle field)
- Distance to next via point
- Time to next via point

- Time to next manoeuvre (next route event)
- Speed
- Speed limit
- Arrival at next via point
- Arrival at destination (default value for the right field)

3.5.15 Distance to next turn (No. 17)

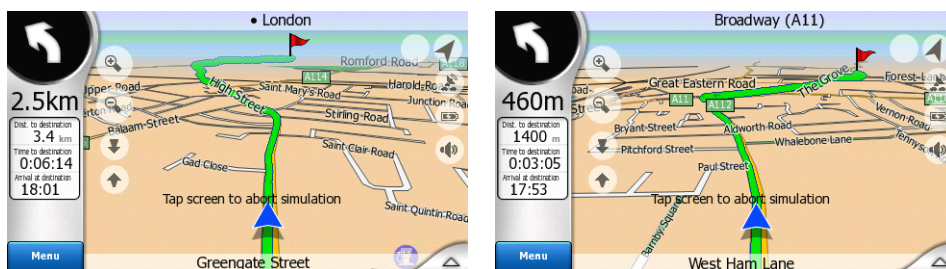
This field shows the distance to go before reaching the next route event (turn, roundabout, exit, etc.)

This field is only displayed when navigating a route.

3.5.16 Next street / Next settlement (No. 18)

This field shows the road or street that comes next in the route itinerary.

If you are not yet in the settlement where this next street is, Navsure will display the name of the settlement instead of the name of the road or street. A bullet symbol will appear next to the name of settlements to help you tell them apart from street names.



This field is only displayed when navigating a route.

3.5.17 Approaching next turn (No. 19)

This bar is only visible when approaching the next route event. It appears on the screen to visualise the distance when you get closer than 300 meters (1000 feet) to the next turn, and it remains visible till you reach the turn.

This field is displayed only when navigating a route.

3.6 Menu

Tapping this button brings up a menu that allows you to access some of the most frequently used functions of Navsure.

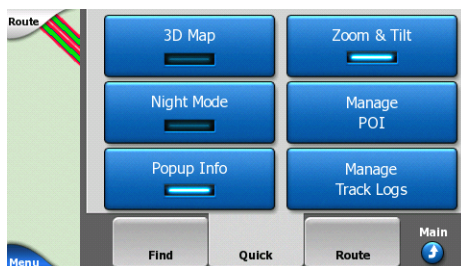
3.6.1 Find tab

The first page of the Menu is Find. It lets you select a destination without first having to locate it on the map.



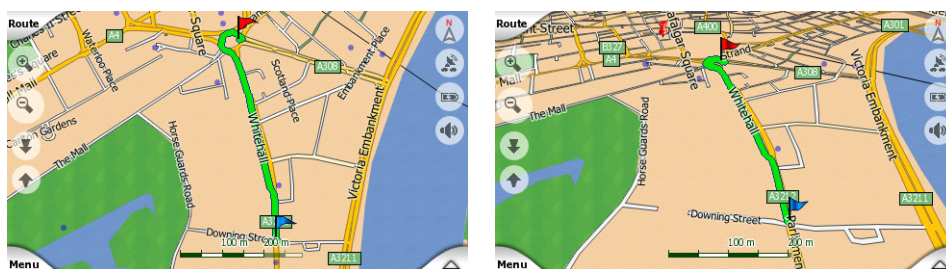
3.6.2 Quick tab

This provides quick access to some configurable options.



3.6.2.1 3D Map (switch)

When the light is on, the map shows a perspective view. You can use hardware buttons 1 and 2 to change the angle of the view. When the green light is off, the map is displayed in a conventional top-down view. This 2D view is also the end of the tilt range, so it can also be accessed by tilting the map up. Conversely, 3D mode can be switched on by tilting down in 2D mode. Map view modes are described here: Page 40.



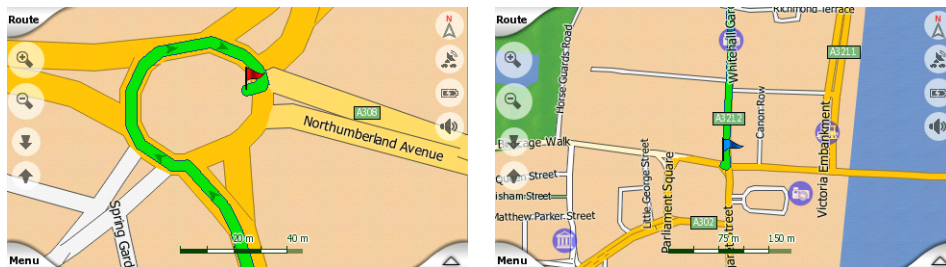
Note: When you reach 2D view by tilting the map, Smart Zoom will tilt the map as you press the Follow button or it disappears after the timeout (set in Advanced settings) expires. Use the 3D Map toggle to permanently switch to 2D view.

Note: If the map is zoomed out so that the view angle is automatically raised to a top down view, this button will have no immediate effect. When you zoom back in, the view angle will or will not change according to the new state of the button.

3.6.2.2 Zoom & Tilt (switch)

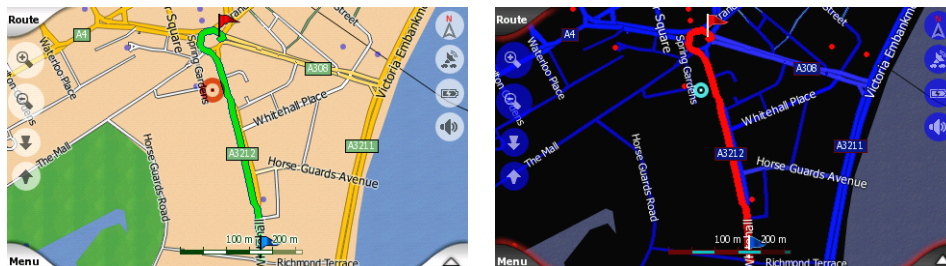
When the light is on, additional transparent buttons (Page 49) appear on the left side of the map screens for zooming and tilting without the use of hardware buttons.

The Tilt buttons appear only at higher zoom levels. If you zoom out, they disappear.



3.6.2.3 Night Mode (switch)

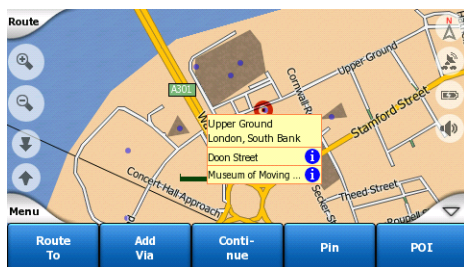
Turn on or off the night colours manually to override the automatic colour scheme switching.



Note: Using this option turns off the Automatic Night Colours feature. You need to re-enable it at the General settings screen (Page 66) to have the colours change automatically again.

3.6.2.4 Popup Information (switch)

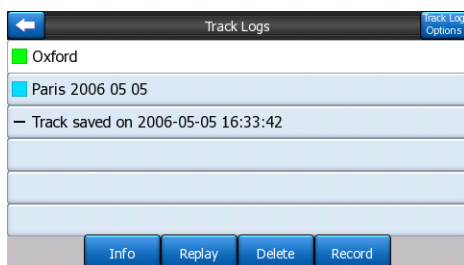
When this feature is enabled, tapping the screen (activating the Cursor, a radiating red dot) on either of the map screens also opens a pop-up box with the selected street name, house number and the name of the nearby POIs, if any.



Tip: Tapping one of the blue Information icons behind the POI names shows the details of the appropriate POI item.

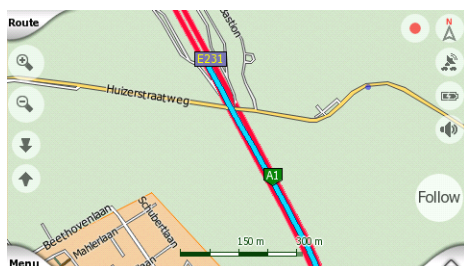
3.6.2.5 Manage Track Logs

Using Navsure it is also possible to save the track logs of your journeys. This screen lets you manage all your track logs. When it comes up, it shows a list of all track logs already saved.

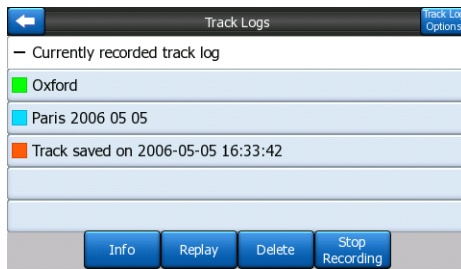


The original name of a track log is the date and time when it was recorded. You can change their name to something more meaningful if you wish.

Each track log has a colour, shown to the left of its name when the track log is visible on the map. If the track is not visible, a horizontal line is shown here. Tapping the line of the highlighted track log will toggle between showing and hiding that log. The track log will be drawn on the map using the colour next to its name.



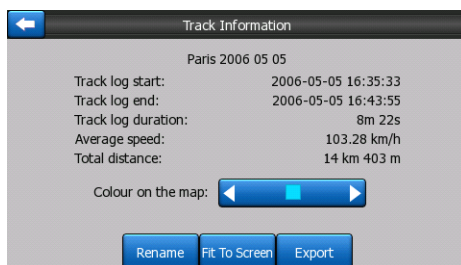
When a track log is being recorded, a new line appears in this list with a horizontal line, as newly recorded track logs are not shown in the map normally.



Tip: If you wish to see the track log currently being recorded, highlight its line then tap again to make it visible.

In this screen you have the following options:

- **Record:** this will initiate track log recording. A new line appears in the list, and GPS position data will be saved until you stop the recording or exit Navsure. A red icon (Page 53) is shown on the map screens to let you know that a recording is in progress. Tapping that icon opens this Track Log screen.
- **Stop recording:** if recording is in progress, this buttons stops it.
- **Info:** this button opens a screen that shows the track log details, and lets you:
 - change the name of the track log (Rename button),
 - change the colour of the track log (Colour on the map selector),
 - have it displayed on the map (Fit to screen button),



- **Replay:** push this button to see a simulation of the saved track log on the map. A green icon (Page 53) will appear on the map screens to let you know it is a simulation only.
- **Delete:** you can delete a track log if it is not needed any more. Navsure will ask you to confirm this action.

3.6.3 Route tab

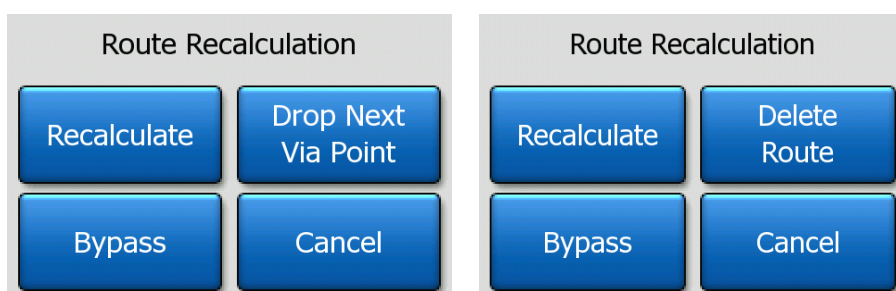
This menu contains options to manage different settings in the program.



3.6.3.1 Recalculate

This menu point is only available if an active route exists and GPS position is present.

It brings up a menu with four options. Using one of these functions you can modify the current route.



Recalculate

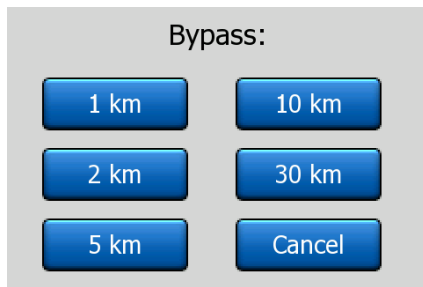
This function repeats the route calculation based on the same settings as used to calculate previously. This possibility is typically used when automatic off-route recalculation is disabled. However you may consider using it when you travel on a road parallel to that recommended by the route. In this case Navsure may not recalculate the route for some time, but you can force recalculation here. This is also the button you will most frequently use when the window appears automatically, provided that the manual route recalculation is set (Page 68).

Drop Next Via Point / Delete Route

You can modify the route to skip the next via point if you decide it is no longer needed. For example, you may have added the via point only to influence the route but you do not want to actually reach it; or you have already almost reached it, and Navsure still keeps on navigating towards that point. When there are no via points left (only the destination), the name of this button turns to Delete Route, and it cancels the navigation.

Bypass

When you run into a traffic jam or roadblock, you may want to have Navsure calculate a route that departs the original route as soon as it can. You will need to select the minimum distance along the original route where your new route is allowed to rejoin the original route. Select the one you feel appropriate for the traffic difficulty you face.



Note: This function is to give you an alternative for the next section of the recommended route. To change later parts of the route or to avoid specific streets or turns, use the Avoid function in Itinerary instead (Page 62).

Note: When you use this feature, Navsure will keep on excluding the same part of the map from later routes until you manually delete the route (Page 62), or restart Navsure.

Cancel

This option returns directly to the map screen without recalculating the active route. If you choose this option when manual route recalculation is configured (Page 68), navigation stops and will be activated again when you are back on your original route.

3.6.3.2 Delete

Tap Delete to erase the active route along with all its route points (start, via points and destination). If you later decide that you need the same route again, you will have to rebuild it from scratch. Navsure will warn you before deleting route data.

This function has a special role if you have used the Avoid feature during your journey. When you arrive at your destination, the route line disappears on the map and navigation stops. The route is now practically deleted, but if you plan a new route, the roads, manoeuvres and areas excluded from your route will also be avoided when planning the new route. Tap Delete to completely delete your previous route together with its Avoid restrictions.

Note: When a POI item is used as a route waypoint, deleting the route will not delete the POI item itself, just its role in the route.

3.6.3.3 Itinerary

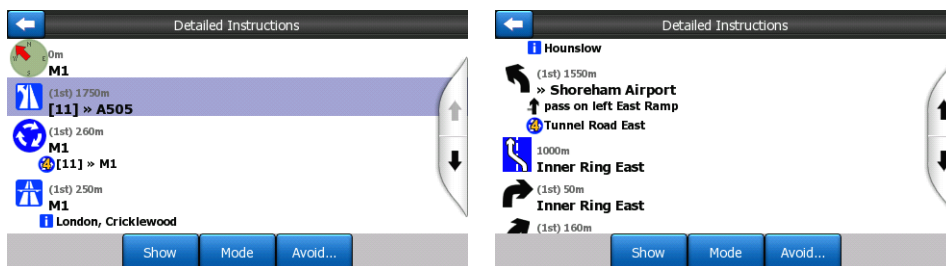
This function opens the itinerary (route event list) of the active route. The Itinerary has three different display modes and two functions.

Display modes

Display modes are different only in the number of events displayed in the list. List items are always shown with all information available including pictograms of the needed action and distance of the event from the previous list item.

The Itinerary is live and constantly updated when navigating a route. The list item coming next in navigation is the highlighted one until you highlight another one by tapping. After that, the highlight remains on the item you have selected.

- **Detailed Instructions:** this is the list displayed when Itinerary is opened. It is the list of events in full detail. All significant junctions are shown in the list, even ones to be passed.
- **Instructions:** by tapping the Mode button once you will see the list of events that need your attention, i.e. the list of manoeuvres during the route. These are the events shown in the Turn preview field and announced by the voice instructions.
- **Route summary:** tapping the Mode button again will show an overview of the route that contains only the significant roads and intersections.



Show

Tap this button to see the highlighted list item on the map. This will help you identify route events in the list.

Avoid

Tap this button to show a list of possibilities for modifying the route. They let you recalculate the route avoiding the highlighted event and sometimes also some of the subsequent ones.



- **Manoeuvre:** this option avoids the highlighted action. For example if you find a turn too difficult during rush hour traffic, Navsure will recalculate the route excluding that turn. If the next street is important in the route, it is likely that Navsure will replace the turn with several easier ones to get to the same street.
- **Road:** when you exclude a road, Navsure will calculate a route that does not use that road. It is useful when you anticipate a traffic jam in a street used in your route, or a roadblock is announced on the radio, and you find that road in your Itinerary.

- **Distances:** you can also find some distance buttons in this list. They are similar to the ones in the Bypass list of the Recalculate menu (Page 61), but these can also be used for distant parts of the route.

Note: You need not open Itinerary if you run into a roadblock or traffic jam. To get an immediate alternative route use the Bypass function of Recalculate (Page 61).

Note: When you use this feature, Navsure will keep on excluding the same part of the map from later routes until you manually delete the route (Page 62), or restart Navsure.

3.6.3.4 Fly Over

This feature has no navigation function, it merely provides a quick view of the route. It will present a simulation of the route showing what you will see later when navigating.

Lifelike simulation

Tap the Fly Over button.

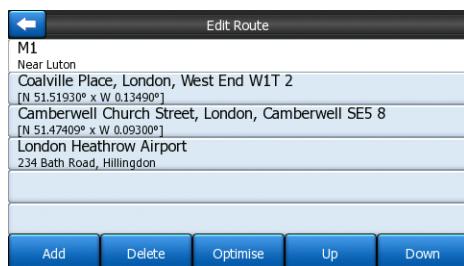
In this mode the simulation is run at normal speed (using the speed limit of the streets and roads in the route), and voice instructions are also played.

This mode is mainly useful for demonstrating Navsure, or to learn the way it works before you start your first journey.

Tap anywhere on the screen to stop the simulation.

3.6.3.5 Edit

Tap Edit to see the list of all points used in the route. The first item in the list is the departure point of the route without a valid GPS position, the last reached via point if you open the list during navigation, or the point where Navsure most recently recalculated the route. This means the list is permanently updated, and via points drop out during the journey. The last item in the list is your final destination.



Use the arrows on the right to browse through the list and tap any line to highlight it. You can perform the following operations:

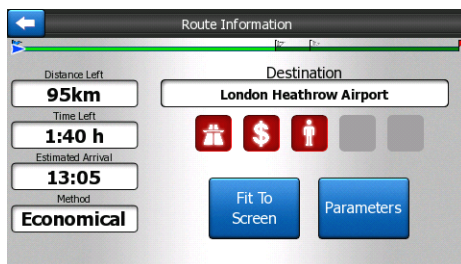
- **Add:** you can add a new route point (or a new final destination if the highlighted item is the last one in the list) after the selected point. The Find menu

opens automatically to let you search for an address, POI, coordinates, one of your favourite destinations, or select a point from the History list. As soon as you select any of these, Navsure returns to the Edit screen and your selection appears right under the highlighted line.

-  **Delete:** you can delete the selected point from the list. If the highlighted item is the last one in the list, the previous via point will be promoted to be the final destination.
-  **Optimise:** you can optimise the order in which you will drive through the via points, if there is no specific order you would like to keep. When tapping this button, Navsure reorders the list instantly to save you time and fuel. Optimisation is for via points only. Your starting point and destination remain in their positions, of course.
-  **Up and**  **Down:** using these buttons you can reorder the list by moving the highlighted item up or down in the list.

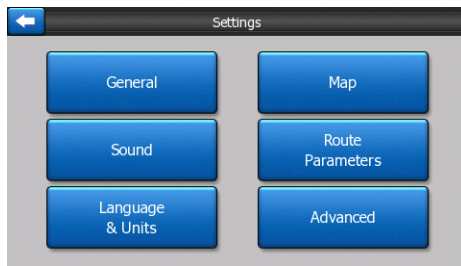
3.6.3.6 Info

This screen shows information about the current route and has a few additional options to check and modify your active route.



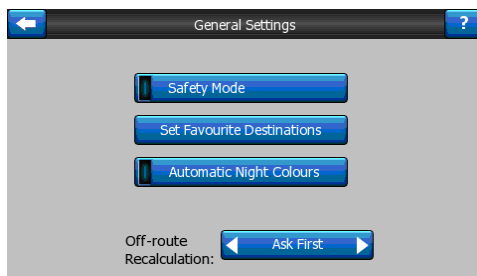
4 Settings

Navsure provides several settings in order to let you customise the functions of the program. The Settings screen can be accessed directly from the Main menu screen (Page 38) and from the map screens by using the battery icon, while some of its sub-screens are accessible from other parts of the program.



4.1 General settings

These are the basic settings of Navsure.



4.1.1 Safety Mode

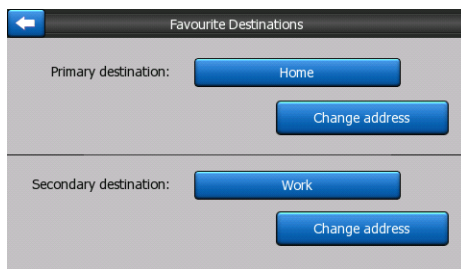
Safety mode will disable the touch screen above 10 km/h (6 mph) to keep your attention on the road.

You are still able to use the hardware buttons, but you cannot set a new destination or change the settings.

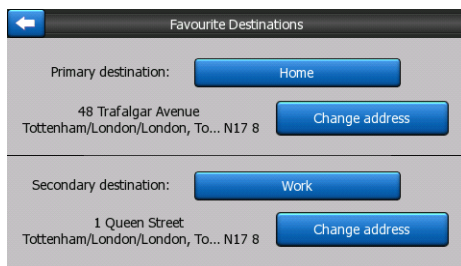
When you disable Safety Mode, Navsure will warn you.

4.1.2 Set Favourite Destinations

You can select two of your most frequent destinations to be your favourites. You can start navigating to either of them by only two taps on the screen. The original names of these points are Home and Work.



You can rename them and specify their locations. To determine the location you can use the same Find menu options as for a route destination, and depending on that choice and the information available, the location will be shown here as a street address, a latitude/longitude position, or both.



Note: *If you tap either of your favourite destinations in the Find menu before defining it, Navsure will offer to take you to this screen to set it up.*

4.1.3 Automatic Night Colours

Using the automatic night mode, Navsure will change between the daylight and night colour schemes a few minutes before sunrise and a few minutes after sunset based on the time and location information provided by your GPS. Once you set a permanent colour scheme in the Quick menu (Page 58), this automatic mode turns off. If you need Navsure to switch between colours for you again, you need to re-enable this feature.

4.1.4 Route Recalculation

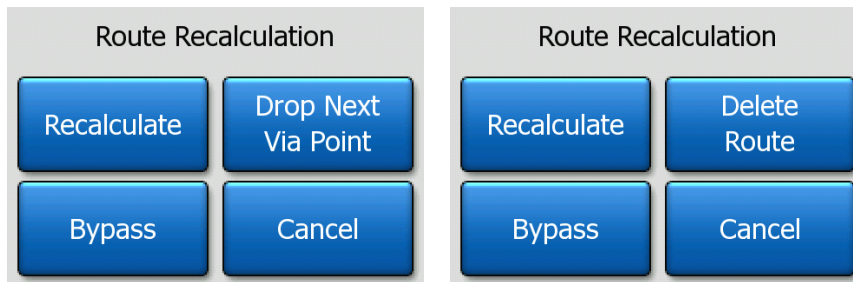
Once a route is planned, this setting will tell Navsure what to do when you deviate from that route.

4.1.4.1 Automatic

The route will be recalculated automatically a few seconds after you go astray.

4.1.4.2 Ask First

Navsure can also ask your preference each time you leave the planned route. The route will not be recalculated until you make your choice from the menu that automatically appears .



Your options are:

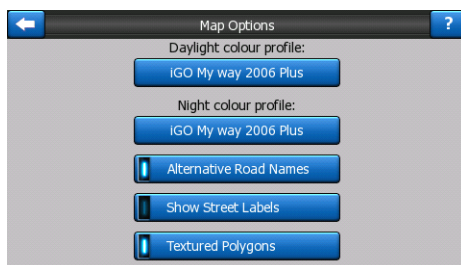
- **Recalculate:** Navsure will recalculate the route with the previous settings. The result is the same as if Automatic recalculation was selected.
- **Drop Next Via Point / Delete Route:** Navsure will remove the next via point from the list and recalculate the route without it. If you have only one target left, the label of the button will be Delete Route, and it will end navigation.
- **Bypass:** if you have deviated from the original route because of a traffic jam or roadworks, you can instruct Navsure to avoid the original route for a specified distance.
- **Cancel:** you can exit without recalculating the route. Navigation stops and will be activated again when you find your way back to the original route.

4.1.4.3 Disabled

If you stick to the original route, and you wish to get back to it on your own, you can disable recalculation. This way guidance will stop until you return to the recommended route on your own.

4.2 Map settings

You can set a few parameters determining the appearance of the maps in Navsure.



4.2.1 Daylight / Night colour profile

Navsure comes with different colour schemes for both daylight and night use. There is always one selected daytime scheme and one selected night-time scheme.

Navsure uses these when switching from day to night and back.

Tap the appropriate button and select a new scheme from the list.

4.2.2 Alternative Road Names

Some highways have an international name or number for foreign travellers. You can decide whether to show only the local name or both.

4.2.3 Show Street Labels

You can set whether or not to see the names of the streets and the POI icons on the map when driving. Based on the current zoom and tilt levels, street names are displayed either aligned with the street or on signposts stuck into the streets (Page 42). If you switch these signs on, it will be easier to recognise your location on the map, if you turn them off, it will be easier to see the road geometry.

Note: You can only disable street names and POI icons if Navsure follows your position. As soon as you move the map and Lock-to-Position (Page 50) is disabled, street names and icons become visible again. Tap Follow to re-enable Lock-to-Position and have the labels and icons disappear again.

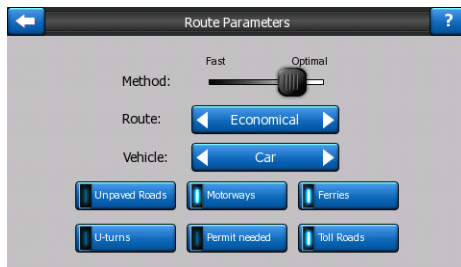
4.2.4 Textured Polygons

Enable textured polygons, and have rivers, lakes, forests and other large objects displayed in a more realistic and attractive way on the map.

Disabling it will lead to uniform areas but better performance for old devices with a slow processor. See Page 43.

4.3 Route parameter settings

This is a very important page. Settings here determine how routes will be calculated. This screen is directly accessible from the Route Information screen.



4.3.1 Method

Use the handle to set the speed of the route calculation. In the leftmost position the route may not be optimal but the calculation will be very fast. Sliding it to the right will result in more accurate routing in an increased amount of time.

Note: Since Navsure calculates routes very quickly, the position of this slide is only used for long routes. Short routes are always calculated to give you the optimal result independent of the slider.

4.3.2 Route

Here you can choose from three different route types.

4.3.2.1 Short

Choosing Short will result in a route that has the smallest total distance of all possible routes between the given points. This is usually preferred by pedestrians, cyclists or slow vehicles.

4.3.2.2 Fast

Choosing Fast will result in the quickest possible route, given that you can travel at or near the speed limits on all included roads. This is usually preferred for fast and normal cars.

4.3.2.3 Economical

This setting is a wise combination of the previous two. Although basically going for the fastest solution, if there is another route taking a bit more time but a lot less distance compared to the fastest one, Navsure will choose this one instead to save fuel.

4.3.3 Vehicle

You can set the type of the vehicle that you will use to navigate the route. Based upon this setting, some of the road types will be excluded from the route, or some of the restrictions may not be taken into account (e.g. emergency vehicles have no restrictions).

Furthermore, when Bus or Lorry is chosen, the program assumes that high speeds cannot be achieved, and this information is taken into account when calculating the route, the estimated time enroute (ETE), and the estimated time of arrival (ETA).

Available values:

- Car
- Taxi
- Bus
- Lorry
- Emergency

4.3.4 Road types to include/exclude

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.

Note: *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, Navsure will use them but only as much as necessary. In this case a warning icon will be shown on the Route Information screen, and the road not matching your preference will be displayed in alternate colour on the map.*

4.3.4.1 Unpaved Roads

Unpaved roads are excluded by default, as they can be in a bad condition and you usually cannot reach the speed limit on them.

4.3.4.2 Motorways

When driving a slow car or towing another vehicle, you may prefer not to take motorways.

4.3.4.3 Ferries

The accessibility of temporary ferries is not necessarily included in the map data. Furthermore you may need to pay fare, so you may consider disabling them from the preset enabled status.

4.3.4.4 U-turns

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.

Turning back on dual carriageways is not considered as a u-turn.

Note: If you are not totally against u-turns, leave them on here, and add a certain penalty (equivalent extra distance to travel) in Advanced settings Route options .

Note: Via points are handled as stopovers with regards to u-turns. It means disabling u-turns on this page will avoid u-turns during the entire route if possible, but when reaching a via point, the following part of the route may be planned starting in the opposite direction.

4.3.4.5 Permit needed

To use some roads or enter some areas you may need special permit or permission from the owners. These roads are excluded from your routes by default. Use this switch if your vehicle is authorised to enter.

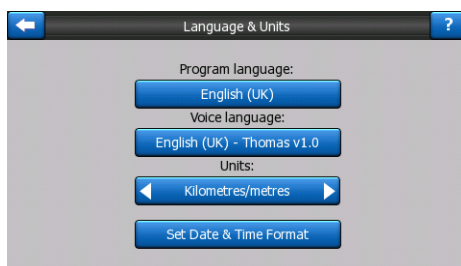
4.3.4.6 Toll Roads

Toll roads are included in your routes by default. If you wish to travel more to avoid paying a toll, disabling them will make Navsure plan the best toll-free route for you.

Note: You have a few more ways to influence routing and route recalculation in Advanced settings Route options.

4.4 Language & Units

Here you can set the languages, measurement units, and date and time formats used by Navsure.



4.4.1 Program language

This button displays the current written language of the program. By tapping the button you can select from a list of available languages. Navsure will have to be restarted if you change this setting. Navsure will ask for confirmation before it restarts.

4.4.2 Voice language

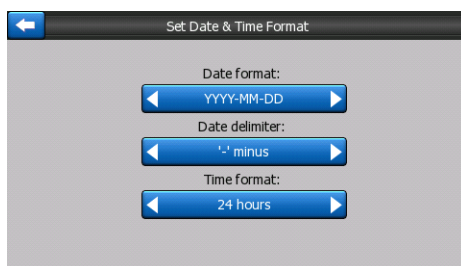
This button shows the current language of the voice guidance. By tapping the button you can select from a list of available languages and speakers. Tap any of these to hear a sample voice prompt. Just tap OK when you have selected the new spoken language.

4.4.3 Units

You can set the distance units to be used by the program. Navsure may not support all of the listed units in some voice guidance languages. If you select a measurement unit that is not supported by the chosen voice guidance language, you will see a red warning message under the selector.

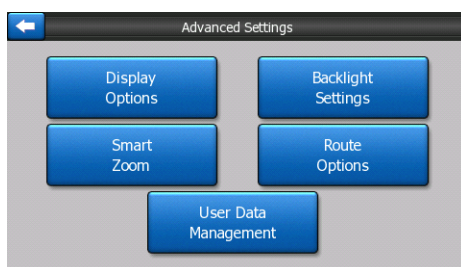
4.4.4 Set Date & Time Format

You can set the date and time format displayed by Navsure. Various international formats are available.



4.5 Advanced settings

These screens let you set a large number of different advanced settings and initiate some special functions. These settings and functions are divided into groups.



Tap on any button to set the corresponding parameters. They all open new windows where you can make your desired changes.

4.5.1 Display options

These settings determine how Navsure displays different content elements or how it presents the screens.



4.5.1.1 2D in Map mode (and North-up orientation)

The normal use of the Map mode is to browse the map and look for different places on it. It is usually done in a top down view having north towards the top of the map. By default Navsure uses the same look for the map in both Map and Cockpit modes.

Use this switch to instruct Navsure to always open the Map mode in 2D with North-up orientation for map browsing purposes.

Note: You will still have the possibility to rotate and tilt the map, but the map will return to 2D mode whenever Map mode is started.

4.5.1.2 3D in Cockpit mode (and track-up orientation)

The normal use of the Cockpit mode is cruising or navigating, when the road lying in front of the driver is the most important part of the map. It is usually done in a 3D view with the current direction towards the top of the map. By default Navsure uses the same look of the map in both Map and Cockpit modes.

Use this switch to instruct Navsure to always open the Cockpit mode in 3D with Track-up orientation (automatic map rotation) for driving purposes.

Note: You will still have the possibility to switch the map to 2D view or north-up orientation, but the map will return to 3D mode with map rotation whenever Cockpit mode is started.

4.5.1.3 Zoom in after find

When this switch is turned off, Navsure will centre the map to the location selected in Find but will not change the zoom level. If you turn this switch on, Navsure will also zoom in to the selected point.

The zoom level in this case depends on the type of object you have searched for. For example in the case of a city search, the zoom level will show you the whole settlement or at least a significant part of it around its centre. Selecting a POI, a junction or an exact address will give you a closer look with only a few streets on the display.

4.5.1.4 Coordinate display format

Positions are sometimes displayed with their addresses, and sometimes with their coordinates. This setting lets you choose between displaying coordinates in degrees (dd.dddddd); degrees and minutes (dd mm.mmm); or degrees, minutes and seconds (dd mm ss.s).

Note: *the coordinate display mode is independent from the coordinate input in Find menu. You can use all three formats freely on the coordinate input screen.*

4.5.1.5 Cockpit screen layout

Their content is fixed in Cruise mode (when there is no active route), but for Navigation mode you can change their content on this screen. The available values are listed here: Page 55.