carNAVi Hardware Manual

Global Positioning System In-Car & Portable Navigation

carNAVi PRO TV



User's Agreement

We greatly appreciate you choose a carNAVi GPS product. To avoid you unnecessary troubles, please read this manual carefully.

Please install this product correctly. Do not block the driver's view or safety airbag.

The manufacturer shall not assume any compensation or responsibility to product failure or other property loss or personal injury due to incorrect installation or usage of this product.

Any use of our hardware, software or maps implies that you agree to the following terms:

- 1. The carNAVi material is intended to be used as travel aid. It is the user's responsibility to use it in a safe and prudent way, including the visual real-time verification of streets, roads, road-signs and directions as well as traffic conditions. carNAVi rejects any and all liabilities for any loss, injury or damage, be it direct or indirect and regardless if carNAVi was aware of the possibility of any such loss, injury or damage.
- 2. The map data used in our devices are not endorsed by commercial organizations. We provide no warranty and bear no responsibility for any damage or loss due to any consequence of using of these maps. Use at your own risk!
- Your use of the carnAvi material is limited to non-commercial activities (e.g., navigation on a leisure hiking). You may also use the material as an aid, indirectly supporting your business activity (e.g., as the driver of a transportation business).
- 4. Any other commercial use of carNAVi hardware or software including maps for business purposes is explicitly forbidden without the prior written permission of carNAVi. This includes, among others, including it in commercial products or commercially operated Websites.

The navigation system, as a high-quality product, contains operating system and software provided by carNAVi. The manufacturer has spared no efforts in manufacturing the hardware and developing application software to ensure this product runs perfectly. In case of malfunction, the manufacturer shall not assume any compensation or responsibility on property damage or property loss or personal injury except maintenance as specified according to quality assurance regulation.

carNAVI does not assure or guarantee effectiveness, completeness or accuracy of the electronic map used in this navigation system, and shall not assume any compensation or responsibility on personal injury and property loss due to limitation of the electronic map.

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1 Notice

1.1 Information Instruction

The navigation system adopts the most advanced satellite navigation technology and detailed street map so it can direct you to the destination easily. In order to let you obtain the best capabilities of the new system, please read the instruction before operating.

Illustration



Warning

Users shall comply with the information provided in case of any threat to personal safety.



Caution

Users shall comply with the information provided in case of any damage to this device.



Tips

Additional information provided for user's reference.

Global Positioning System is launched and maintained by USA. This system can receive the satellite signals from Global Positioning System. Using these signals, the system can indicate current location and help you find required destinations.

This navigation system can provide visual map and voice instruction. When you are at the crossing or near the turnoff, the device will remind you of the driving distance and direction.

1 2 Safety Information

- While driving you must obey all traffic rules and learn how to operate skillfully before using the system.
- As the system will distract the drivers' attention, in order to keep safety and prevent from accidents, drivers shall not operate the system while driving.
- Shall not only depend on the voice navigation which is only for reference. Because the roads circs, traffic signs and service information aren't always latest, drivers should update maps timely.
- 4. There are shortages of system data, for example, roads circs may change frequently;

therefore, you must notice traffic circs before following the system information.

This navigation system is only used for assisting drivers to make a judgment, and may not measure any direction, distance, place, or landform precisely.

1 3 Safety Caution

In order to prevent users or others from injury or property loss, please read and follow the cautions in below:

- 1. Read instruction
- 2. Keep the instruction properly for later reference
- 3. Obey all operation instructions
- 4. Accessories

Don't use the accessories from another manufacturer, otherwise it may cause accidents.

. Power

Please use the stated power. You must cut off the power and pull off the power plug in rainy days or when you won't use it for a long time.

6. Protect power cord

Make sure the power cord is out of feet touch.

- 7. Installation and wiring
- In order to ensure safety, please consign professionals to carry out the installation and wiring.
- 8. Maintenance and parts change

Please consign professional technician to maintain and change.

9. Keep away from heat source

Please don't expose the device in sunshine or high temperature. Keep it away from heat, such as heating machine, heater or any other heating objects.

10. Keep away from water or damp place

Please don't expose this device in rainy or damp conditions.

11. Cleanness

Please wipe the device with dry and soft cloth after power-off, the volatile chemicals, such as gas or diluting agent.

12. Please cut off power and contact with technician immediately in the following conditions: Power cord or jack damaged;Liquid or particle enters into the device;The device is damaged due to falling off from a high place or incorrect operation:

13. LCD

Prevent LCD from being crashed or fallen, don't touch the liquid flowing out of the device;don't heat LCD or scratch it.

14 Special Tips

1. Whether the positioning and use of GPS can be affected by the weather or anything else?

Yes, lightning, climate (overcast, rainy and cloudy) etc., all may affect the signals and use of GPS.

2. What factors may affect the signals of GPS?

- 1) SA satellite message is from DOD in USA. The precision of GPS signal is directly controlled by DOD in USA, in order to ensure security, the signal precision for civilian use is lower than that for army, so in some sensitive places, military base for example, the signals can be interfered and the precision of positioning may be reduced.
- 2) Weather factors (macula, bad weather may reduce the intensity of signals and result in instable orientation.)
- 3) Electric, electromagnetism, wireless wave and strong magnetic field all has different certain interference
- 4) Under veils, such as buildings, cars, heat insulation papers, metal veils and trees, they all may reduce the signals of GPS, therefore, place the device close to the windshield.

3. Why does not GPS receive signals in buildings?

The signals can be obstructed easily by buildings and metals, and they can't penetrate through the wall of buildings, so the GPS can't be used in buildings.

4. Does the vehicle tint affect the signals of GPS?

It will have certain effect on GPS when the material of sun membrane contains metal.

5. How long does the GPS take to position after power on?

About 1 minute the GPS begins to positioning if it is located in wide and non-interference places, less than or equal to 5 minutes is in accordance with the standard of GB/T 19392-2003-5.3.

6. What is the maximum navigation time? How long does it take to charge up?

Maximum navigation time: 3-4hrs with volume and brightness at 50%.

Time for charging: 3-3.5hrs under standby mode, the time will be different in different surroundings, the unit can also be charged when power on, but the time shall be longer, it is normal that the unit heat while charging.

7. What advantages does our GPS solution have?

It supports quick global positioning, stable signals, free of service, detailed map for each city, voice navigation for the whole journey, intelligent lay out the route, operation system of Microsoft windows CE.net, 5.0 inch TFT touch screen with 65k colors internal GPS and high capacity rechargeable LI-polymer battery.

8. Normally, how many satellites can GPS receiver capture?

Normally, most GPS receivers can capture 8-12 satellites.

9. Will the music be distorted if the volume is too high? Sometimes WMA files can not be played, why?

Please make sure whether the music is obtained legally? If not it must be of big noise. WMA files has copyright protecting, it needs to be decoded by decoding software during operation.

10. How to avoid device crashing at the moment of car starting up?

Users must note that do not connect the GPS with the linker until the car is started up.

2 Brief Introduction

2.1 Function Introduction

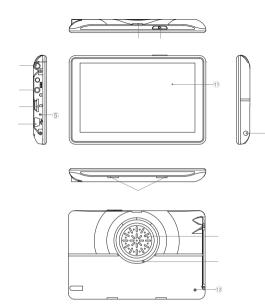
- >GPS Navigation
- >Bluetooth
- >Support Analog TV
- >Video format: support AVI, WMV, MP4, 3GP
- >Audio format: support WMA, MP3, WAV
- >Support LRC and synchronized lyric displayed
- >E-book format: support TXT
- >Picture format: support JPEG, BMP, PNG
- >Integrated speaker
- >Support Micro SD card

2 2 Accessories

Before using, please make sure whether the device and accessories are complete, if there is any lack or damage please contact with the local dealer or agent as soon as possible.

>carNAVi ProTV 1pcs
>Car Charger 1pcs
>USB Cable 1pcs
>Hardware Manual 1pcs
>Software Manual 1pcs

2 3 Illustration



1.Power Key

2.Reset

12.Mic

3.Anlog TV Antenna 4.MINI USB Port

5.Power Indicator

6.Earphone Jack 7.Micro SD slot 8.Speaker 9.Touch-pen 10.Bracket block slot 11.Display Screen Power on /off /sleep

When the device is crashed halt or works abnormally, press this key to reset the system

①Exchange the data with PC by MINI USB cable

②Charge the GPS device by connecting car charger.

The light is red during charging, it will turn green when the battery is fully charged.

Hands-free input the voice

3 Basic Operation

3 1 Battery and Charger

3.1.1 Power Supply

In-vehicle/portable GPS navigation has two ways of power supply: battery supply and power supply.

When the device doesn't connect with the adaptor, it is supplied by the lithium battery. The icon at the top right corner on the main interface of system indicates the current remaining power.

When the device connects with the adaptor, it is supplied by the outer power.



[Tips] Under normal condition(volume and backlight at 50%), it can last about 2.5~3.5 hours after the battery is fully charged. Some functions need to consume a lot of battery energy, such as audio/video playing, high backlight and Bluetooth, which may reduce the using time.

3.1.2 Car charger

- 1. Connect one end of the car charger with power input jack of device.
- 2. Connect the other end with the cigarette lighter of the car in order to supply power and charge up the device at the same time.



[Caution] Please insert the car charger after car starting up in order to avoid the damage of the device while starting up.

3.2 Basic Use

3.2.1 Power Key

1. Power on:

When the GPS power is full or after connecting the device with outer power supply, press the power key for few seconds to start up.

2. Sleep mode:

When the device turns on, press the power key for several seconds to enter into sleep mode, the GPS will automatically display the last state when next start-up.

3.2.2 Reset Key / Power-saving Key

When the system has no response, Press the reset button and then press Power key to restart the system, the performances are as below:

- 1. There are delay and stagnation during switch interface:
- 2. There is no response when click the icons.
- 3. Power key is unavailable.



[Caution] Please backup the data before resetting the system.

3.2.3 Car Mount

The car mount consists of salver and bracket. While using the device in car the device should be fixed in the proper position of fore-windshield.



[Attention] Please choose the proper position to place the car mount. Do not block the driver's view and place the device arbitrarily without fixing; do not fix the device in the area that the airbag

3.2.4 Micro SD Memory Card

Correctly insert Micro SD card into the slot, and do not remove the Micro SD card during operation.

3 3 Connection with Computer

Connect the device with computer by the USB cable. One end connects with PC and the other end connects with the device.

1. Data transmission: There are two new "mobile disk" icons in "my computer" after the device is successfully connected with computer, the first icon stands for the built-in flash memory of the device, the second stands for the Micro SD card storage of the device. (If the Micro SD card is not inserted, the second icon of the disk is unavailable). Then, you can use them as normal USB flash disk.



[Caution] 1. Please do not delete and revise the data in the built-in flash memory of the device, in case some functions of the device are out of work. 2. Based on Windows 98 operation system, please install the driver before operating the device. The operation of communication between GPS and computer are exampled based on the Windows 98 operation system or above version. 3.When GPS is connecting with computer by USB line, it can not operate the current functions.

2.Safely Remove: Please remove the USB line after finishing the data transmission (just operate it as the USB flash disk).

4 Function operation

The device supports navigation, audio/video playing, E-book, Analog TV, Photo browsing, and Bluetooth for hands-free and system setting functions. The main interface is as follows:



4.1 Navigation

4.1.1 The Features of Navigation

The device adopts intelligent navigation system, which uses GPS satellite signal receiver to positioning the mobile vehicle precisely and displayed the mobile vehicle's location on the E-map. The system will automatically calculate the best route when users set the destination, it will help the users reach their destinations safely and quickly.

The system also can provide the functions of visual maps, instant cartoon, voice and instruction and so on.

42 Bluetooth

Press Bluetooth to enter the menu of Bluetooth.





[Tips] when the icon at the left corner of interface shows red, it means the Bluetooth is not connected, if it shows green, it means the Bluetooth has been connected.

4.2.1 Bluetooth pair

Click the (icon to enter into the equipment pair interface.

1. Before using Bluetooth, it should be matched. Click the icon to enter into the pair waiting interface, and then use mobile phone to search for Bluetooth equipment, after finding out the Bluetooth equipment, input a pair password in mobile phone, the password can be found in the pair password setting interface. If connect successfully, "Pair Success" will appear on the screen, or the interface will go back to main interface after 60 seconds.

Return Return to previous menu

① Displaying area for searching time





Tips 1

- 1. Bluetooth of mobile phone should be opened at the same time.
- 2. User can enter Bluetooth interface if only the Bluetooth icon is clicked.

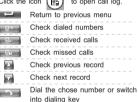
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Number display area :the current called number







switch Delete all records ① Record of calls

4.2.4 Direct Dial

Click the (1) icon, it will switch into the last dialed call automatically. After entering into this interface, please operate other function according to 4.2.2

4.2.5 Bluetooth password

Click icon to enter into the interface of password setting

Return to previous menu

Show the name of current Bluetooth equipment

Show the password of Bluetooth equipment

Revise password

""mean the Bluetooth is still working after

" mean the Bluetooth is still working after exiting the Bluetooth interface

" mean answer the call automatically





4.2.6 Bluetooth connection





43 Analog TV operation

1. Analog TV: click the Analog TV button on the r interface.

on the main interface, enter the Analog TV

Close: Single click to turn off the Analog TV interface

TV signal: Show the TV signal

Save button Save the current broadcasting station

Manual button Click the button, you may manual get the broadcasting station

Delete button Delete the channel

Auto button Click the button, you will autokinetic get the channel

Area button Click the button ,you will choose the different country and area from

the define range

Show area Show the area that your choose

Last Show the last

Show the channel This button show the channel of you search

Click the button volume reduce or volume add



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Click (Player) icon on the main interface to enter into the Music/Movie interface.



4.4.1 Music

1.Click (Music) icon to enter audio folder interface. Then you will find an interface shows "SDMMC "or "ResidentFlash" folder, click the related folder to play the related files.

The function of each icon is as below:

7	Return Return to the player interface		
-	Previous Display the previous file		
	Next Display the next file		
(1)	Upward Return to previous folder		



2. Click CMF icon to open the Music player,

The function of each icon is as follows:

	Return	Return to the Main Interface
-	Play	Play songs
**	Pause	Pause
	Stop	Stop playing Play
Manage	Repeat	Repeat all the song
Cariosca	Random	shuffle all the song
44	Previous	Play previous song
594	Next	Play next song ③
4ntilli	Volume	Adjust volume by dragging sliding block
-	Play Schedule	Adjust play schedule by dragging sliding block
~	Folder	Return to Audio-Folder interface
1	Area of Lyric D	risplay Display the information of current LRC lyric and
		play state of current song
2	Area of Song's	name Display Display the name of the current song
3	Time Current T	ime/Total Time



【Tips】 Audio player contains the function of lyric synchronization.

Please copy both the music and lyric files (LRC format) to the same folder in the Micro SD card, and make sure their names are the same.

4.4.2 Movie

Click the "Movie" icon to enter the Movie folder interface. Then you will find an interface shows "SDMMC" or "ResidentFlash" folder, click the related folder to play the related files. The function of each icon is as follows:

Return to the menu interface of video player Play Play the video file Pause Pause Previous Play previous movie Play next movie Next Stop Stop playing Upward Return to previous folder (1) Volume Drag the slide block to adjust the volume Time Current Time/Total Time



Name

[Tips] On the playing interface, it will display the full screen when double click the playing area; then double click again, it will display as normal.

4 5 Ebook & Picture

Click (Ebook & Picture) icon on the main interface to enter into the Ebook / Picture interface.

Display the name of current file



4.5.1 Ebook

 ${\it 1.Click E-book to enter into E-book folder interface.} Then you will find an interface shows$

"SDMMC "or "ResidentFlash" folder, click the related folder to play the related files

ESC Return to main menu interface
Previous Display previous page

Next Display next page

Next Display next page

Return Return to main interface



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2. Click Ebook folder to open the reader

	ESC Return to main interface		
4	Previous Display previous page		
Pop.	Next Display next page		
Coll	Upward Return to Previous folder		
	Skip Enter into the page selecting interface		

File Name Display current file name

Social walfare txt		Ĭ
Social welfareHome		
Social responsibility Social wetters		
From May 13 to 17, 2008, Longhorn raised F	MB30.000 for	
Sichuan disaster area immediately and took		
Red-Cross at the first time. At the same year Gingfeng participated into t	of July, CEO Chen	
On Jan 29, 2008, due to the severely bad we		
main traffic lines were disconnected, which is large of passengers stopped their steps at 5		
Station For the conce	menamen Natiway	V

2

- Page number Current page number / total page numbers
- 3. Click icon on E-book read interface to enter into the page selecting interface.

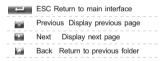
	Number bar	Show the page number	
	Backspace	Delete the last inputted number	
C	Clear Clear	r up all the numbers	

Jump Jump to the number displayed page



4.5.2 Pictrue

1. Click the "Picture" icon on the main interface to enter the Picture folder. Then you will find an interface shows "SDMMC" or "ResidentFlash" folder, click the related folder to play the related files. The function of each icon is as follows:





2.Click Picture folder icon to open the Picture browser The function of each icon is as below:

. !		ESC	Return to main interface
	(22)	Zoom Out	Zoom out the current Picture
	(2)	Zoom In	Zoom in the current Picture
		Rotate	Rotate the current Picture 90
			degree in clockwise
	(2.1)	Slide Play	Display all the Pictures in the
			folder automatically
	n k. m	Previous	browse the previous one
	100	Next	browse the next one
	1600	Upward	Return to previous folder



[Tips]



- 1.Under the full screen, double click the Picture to return to normal mode:
- 2. Zooming out the Picture, click the touch screen with touch pen to play the next Picture.

4.6 System Setting

Click "system" icon on the main interface to set your system, including volume, power, Backlight, Date time,language, system information.



4.6.1 Power Setting

Click "power" icon to enter the power setting interface. The user can check the status bar to know the power, at the same time, also can click a or to set the time for automatically power off.



4.6.2 Backlight Setting

Click "Backlight" to enter Backlight setting interface. The user can adjust the backlight by \blacksquare and \blacksquare , or can click \blacksquare or \blacksquare to set the time for automatically

screen power off.



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4.6.3 Date Time Setting

Click "Date Time" to enter Date Time setting interface. Status bar will show the current separately time, date and time zone.

Separately click "time", "date", "time zone" to set up the time, date and time zone. Through the GPS signals, the time setting refreshes the current time automatically, it means that the time will temporarily return to the factory setting time after the system reset. As soon as the GPS begins to navigate, the time will renew to the standard time. Please note that the time setting should be compatible with the local time.



4.6.4 Language setting

Click "Language" icon to set the language you need.

Support multi-country languages: English、French、German、Spanlish、Italian、Dutch、Russian、Chinese、Korean and so on



4.6.5 System Information

Click "System" icon to view the detailed system information.

- 1. Click "Calibration" icon at the left corner of information box to adjust the touch screen .Choose to move the cursor through middle, left, right, up,down steps.Repeat click the middle of cursor until the calibration is successful.
- Click "Factory Reset" icon at the right corner of information box, the system will automatically return to the factory setting.
- 3. Click "GPS Reset" icon in the middle of information box, the system will automatically clear up the Signal-to-Noise data received.

1	Signal-to-Noise data	(5)	Altitude
2	Channel	6	Satellite no
3	Longitude	7	Speed
ā	Latitude	(8)	Positioning time



5 Malfunction Analysis

If the device does not work smoothly, please inspect it according to the following method. If problems still exist, please connect our Service Centre timely.

Problem	Reason	Method	
Can not power on	Low power	charge the battery	
Power off suddenly	low power	charge the battery	
Touch screen deflected	Calibration is not precise.	Refer to 4.6.6 to calibrate your touch screen.	
No sound when	Tool low volume	turn on the volume	
playing	Poor connection between the earphone and device	insert the earphone properly	
Can' t connect with PC	Poor connection of the USB cable	Refer to the3.3 chapter, connect the USB cable well.	
Can not charge	AC adapter is not inserted well	Please check the adapter is inserted well, and indicator is red.	
Power Key invalid, touch screen and display abnormal	The system crashes	Press the reset key with touch pen to restart.	
Can not receive GPS signal	Depending on the intensity of the local signals. It will take about 1 minute to receive the signal.		
Map data missing	Copy the map data into the SD card again. Contact with local retailer or distributor. You need to enter the activated password when you use the device again.		

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6 Technical Specification

Dimension	129.5*83.5*12.5mm		
Net Weight	About 180g		
	CPU Frequency	SiRF Atlas IV, CPU 500MHz, ARM11; DSP 250MHz.	
System	SD RAM	128MB	
	NAND Flash	2GB	
	External Memory	MAX 16G Micro SD	
	Video	AVI、MP4、3GP、WMV	
Media function	Audio	MP3、WMA、WAV	
Wicdia Idilottori	Picture	JPEG, BMP, PNG	
	E-book	TXT	
Languages	Support multi-country	English, French, German, Spanlish,	
	languages	Italian, Dutch, Russian, Chinese, Korean	
		and so on	
	Car Charger	INPUT: DC 12-24V, OUTPUT: DC 5V /1.5A	
	Battery	3.7V /1400mAH	
Power	Continuous Operation Time	2.5-3.5 hours(voice and background light can	
	Continuous Operation Time	be adjusted to 50%)	
	Power Saving	Automatically standby mode, screen	
		protection(black screen)	
Display	Specification	5.0 TFT-LCD,+5.0 4-line-flat-panel resistance touch	
Display	Pixel	480*272 (RGB)	
	Frequency	1575.42MHz	
	Channels	64 channels	
	Sensitivity	-161dBm	
	Precision	Position: < 10 meters	
	Port	COM7	
	Baud rate	38400	
GPS Module		Hot start: ≤9 sec, average(Open Sky)	
	Start-up time	Warm start: ≤18 sec, average(Open Sky)	
		Cold start: ≤43 sec, average(Open Sky)	
	Refreshing rate	1/second	
Bluetooth(Optional)		Bluetooth V2.0, handfree mobile phone+vanish echo(optional)	
Analog TV	Built-in module	Support NTSC,PAL,SECAM(48-800MHz)	
	Sensitivity	-96dBm	
		Mobility support to 430km/h	
Version update	Map	Update the map at www.car-navi.ph	
	Operation Temperature	-10°C~55°C	
		-25°C~75°C short time storage temperature	
Temperature/humidity	Storage Temperature	-20°C~25°C Long time storage temperature	
	Maximum humidity 80% RH when the temperature should not exceed 40 °C		
USB	USB 2.0 High speed		
Certificate	CE, FCC, ROHS		
	, . 50,		

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