

**Notice: Some functions of this device may be changed in the future. We would not inform you particularly as we have no such responsibilities. You can contact us if you have any queries.**

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## **1. Application range**

- The tested standard can only be suitable for this product.
- The tested standard refers to the Spec, examination method and operating introduction of this product.

## **2. Referred standard**

- Navigation firmware operating standard

## **3. Product introduction**

- 7 inch TFT screen, resolution: 480\*272
  - Stereo earphone, built-in high quality 1.5W speaker, and the volume is adjustable
  - With both button and touch screen
  - Built-in high sensitive SiRF STAR III GPS module
  - With both built-in and outside GPS antenna
  - The navigating firmware in the SD card can be run directly (supports 4 bit middle and high speed SD card)
  - With MP4/MP3 function
  - FM Transmitter
  - Bluetooth for Hand Free(Optional)
  - With built-in lithium battery and 12V charging voltage; also can use car lighter to charge the machine
  - Double displaying system can support both NTSC and CVBS output
  - Video playing format: asf, avi, mp4, wmv
  - Audio playing format: mp3, wav, mid
  - Photo format: BMP, JPG, PNG, GIF;
  - Text format: TXT
  - Indication light: blue when in working indication, and red in charging condition
- 
- You would need to pay the patent fee of using the multi-media firmware.

## **4. Specifications**

<b>Working condition Specs</b>
--------------------------------

<b>Size</b>	<b>195mm(L)*121mm (W) *24.5mm (H)</b>
<b>Working temperature</b>	<b>-10℃ to +60℃</b>
<b>Storing temperature</b>	<b>-20℃ to +70℃</b>
<b>Working humidity</b>	<b>45% to 80%RH</b>
<b>Storing humidity</b>	<b>30% to 90%RH</b>
<b>Air pressure</b>	<b>860MBar ~ 1060Mbar</b>

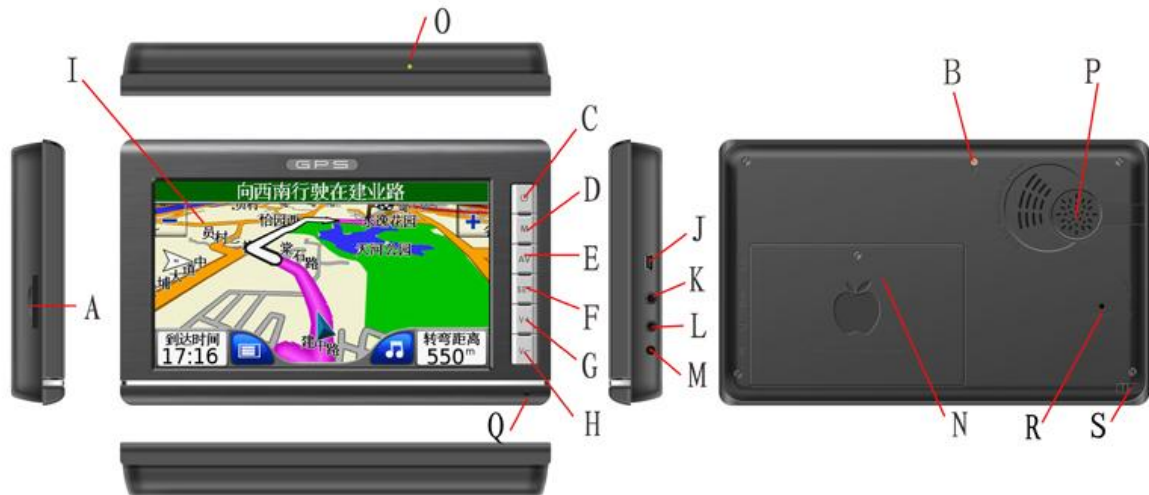
<b>System Specs</b>	
<b>CPU frequency</b>	<b>400MHZ</b>
<b>Chipset</b>	<b>SAMSUNG S3C2440A-400</b>
<b>SDRAM</b>	<b>64MB</b>
<b>Memory size</b>	<b>64MB</b>
<b>Navigation firmware storage</b>	<b>SD card or built-in NAND FLASH</b>
<b>Operating system</b>	<b>WINCE 5.0</b>
<b>Firmware editor</b>	<b>ARMV4</b>

<b>Basic Spec</b>	
<b>Video input type</b>	<b>CVBS, NTSC</b>
<b>Video input voltage</b>	<b>1.0Vpp/75ohm</b>
<b>Screen size</b>	<b>7 inch</b>
<b>Screen resolution</b>	<b>480*234</b>
<b>Audio output</b>	<b>Compound audio track, CD player effect</b>
<b>Sound power</b>	<b>Stereo track: 0.25W/CHANEL, single track ohm/1W</b>
<b>Average power</b>	<b>1.5W</b>
<b>"Sleep" power</b>	<b>&lt;24mW</b>
<b>Dc input voltage</b>	<b>9-30V</b>
<b>Battery</b>	<b>7.4 V / 650mAh</b>
<b>Battery lasting time</b>	<b>1.5 hours (working), 300 hours (sleeping)</b>

<b>GPS hardware Spec</b>	
<b>Receiving module</b>	<b>SiRF Star III</b>
<b>Frequency</b>	<b>1.575GHZ</b>
<b>C/A CODE</b>	<b>1.023 MHZ chip rate</b>
<b>Signal channels</b>	<b>20 channels</b>
<b>Sensitivity</b>	<b>-159dBm</b>
<b>Position accuracy</b>	<b>10m, 2D RMS 5m, 2D RMS, WAAS enable</b>

<b>Speed rate</b>	<b>0.1m/s</b>
<b>Data upgrading rate</b>	<b>1HZ</b>
<b>Signal missing time</b>	<b>0.1s in average</b>
<b>Warm boot time</b>	<b>1s in average</b>
<b>Cool boot time</b>	<b>38s in average</b>
<b>Cold boot time</b>	<b>42s in average</b>
<b>Maximum position altitude</b>	<b>18,000m</b>
<b>Maximum speed rate</b>	<b>515m/s</b>
<b>Acceleration</b>	<b>&lt; 4g</b>
<b>Built-in antenna type</b>	<b>Built-in power porcelain antenna</b>
<b>Magnified effect of the built-in antenna</b>	<b>27dB</b>
<b>Voltage of the built-in antenna</b>	<b>3.3V±5%</b>
<b>Current of the built-in antenna</b>	<b>15mA</b>
<b>Exterior antenna port</b>	<b>MMCX</b>
<b>Exterior antenna voltage</b>	<b>3.3V±5%</b>
<b>Magnified effect of the outside antenna</b>	<b>27dB</b>
<b>Current of the outside antenna</b>	<b>15mA</b>

## 5. Button illustration



A	<b>SD card Slot</b>	K	<b>AV input/Output port</b>
B	<b>GPS external antenna port</b>	L	<b>Earphone port</b>
C	<b>"POWER"</b>	M	<b>DC port</b>
D	<b>"MENU"</b>	N	<b>Battery case</b>
E	<b>AV switch button</b>	O	<b>Charging indication</b>
F	<b>"SET"</b>	P	<b>Speaker</b>
G	<b>VOL +</b>	Q	<b>Mic</b>
H	<b>VOL -</b>	R	<b>Reset</b>
I	<b>Screen</b>	S	<b>Stylus</b>
J	<b>USB port</b>		

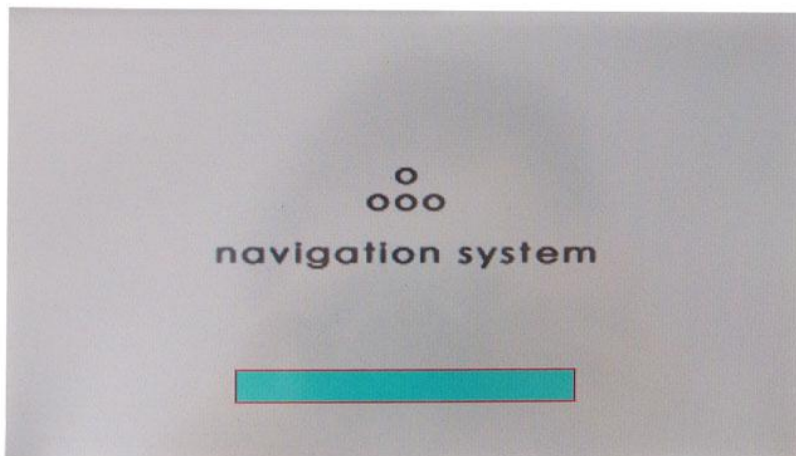
## 6. GPS accessories

- ◆ GPS machine
- ◆ Stereo earphone
- ◆ Car lighter adaptor DC(  $\phi$  4.0mm) 1PCS or 100~220V to DC12V adaptor 1PCS
- ◆ 3.3V MMCX outside antenna (optional)
- ◆ AV cable
- ◆ GPS stander, bracket
- ◆ Manual (English & Chinese)

## 7. Operation

### 7.1 power on / off operation

- ◆ Press and hold "POWER"(C) for 3s or more, the LCD will display our company LOGO (if it was preloaded ahead)



- ◆ Under working status, press "POWER"(C), the machine will be in power saving condition as the following.

Press "POWER" (C) again, the machine will be back to working

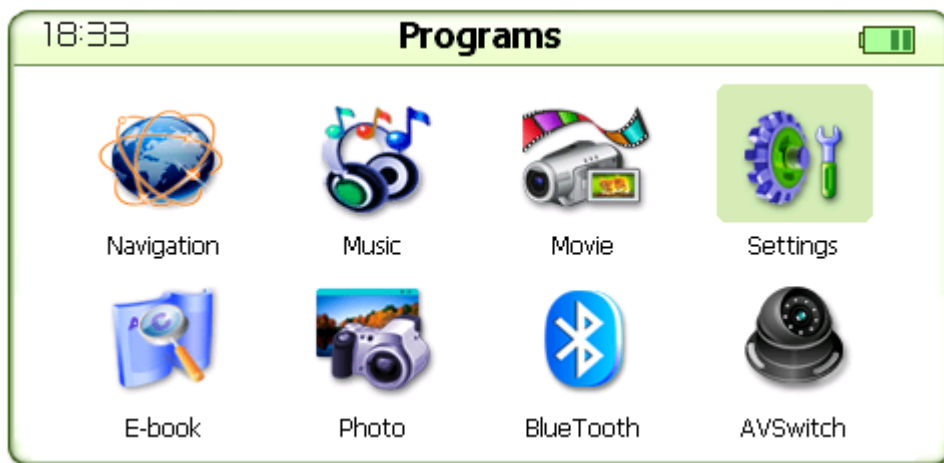


interface.


- ◆ Press "POWER" (C) for 3s at the working condition, the machine will enter power off condition as the following:



Turn on the GPS, the navigator will display the LOGO (if it was preloaded ahead), main menu comes out, there are 6 items there, as the following:

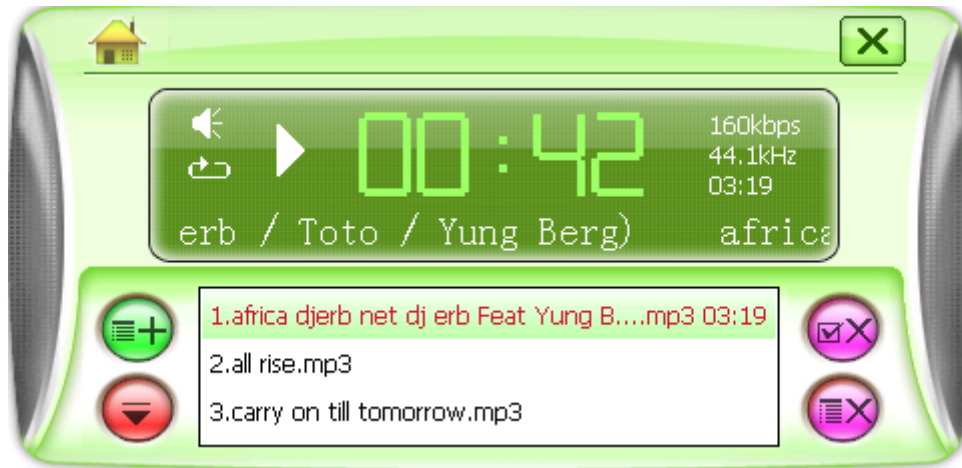


### Music playing operation:

- ◆ Under the main menu interface, click "  ", then enter the music playing interface, as the following:

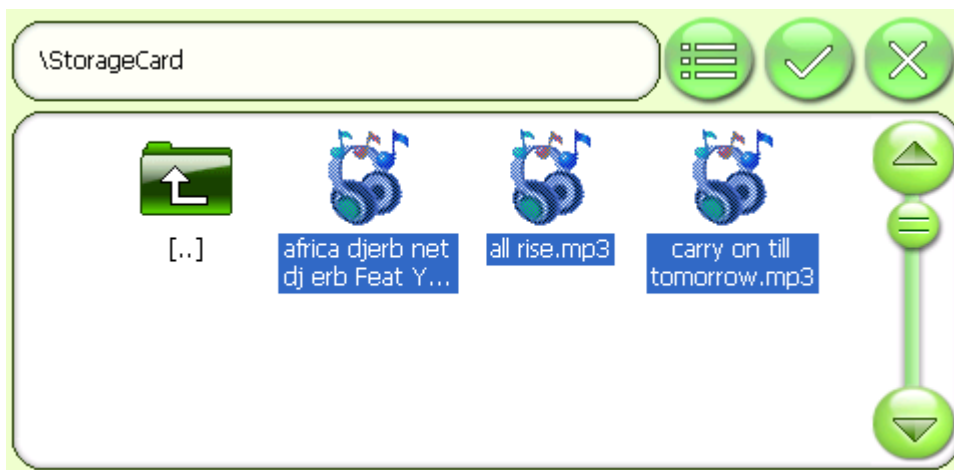


Click "  ", to choose the audio file track as the following:



**Choose the audio file you want, double click it to confirm your choice.**

**Click "☰" can choose all the files, as the following:**



**Click "✕" go back to the music playing interface:**





Click "" to continue adding audio file.

Click "" to go back to the music playing interface.

Double click the file name to play the music.

◆ Other functions are as the following:

Click "" to pause;

Click "" to choose the next item;

Click "" to choose the last item;

Click "" to repeat on, click again to play randomly;

Click "" to make the speaker on, click again to make it off;

Click "" to delete the chosen file;

Click "" to delete all files;

Click "" to exit the music playing interface.

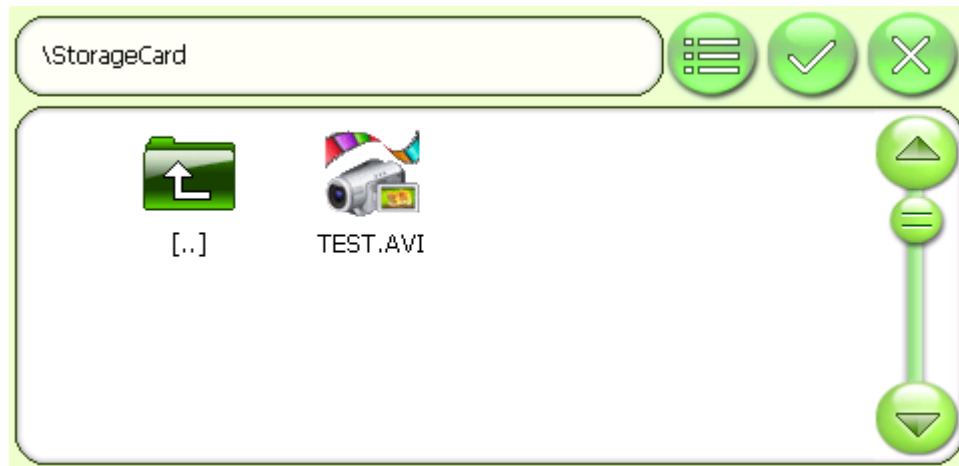
Click "" to increase volume and "" to decrease the volume.

### Movie playback:

Under the main menu, click "" to enter the movie playback interface, as the following:



Double click the "Storage card" to the following interface




**Choose the file which you want, double click to confirm you choice.**



**You can also click "  "to choose all the files, as the following:**



**Click "  ", then,  to continue adding video file, click "  "to go back to the video playing interface.**

Under the movie playback interface, click " " or double click the screen can widen the screen interface.

**Other functions are as the following:**

Click " " to make the speaker on, click again to make it off;

Click " "to choose the next item;

Click " "to choose the last item;

Click " "to delete the file you chose;

Click " "to delete all files;

Click " "to exit the movie playing interface.

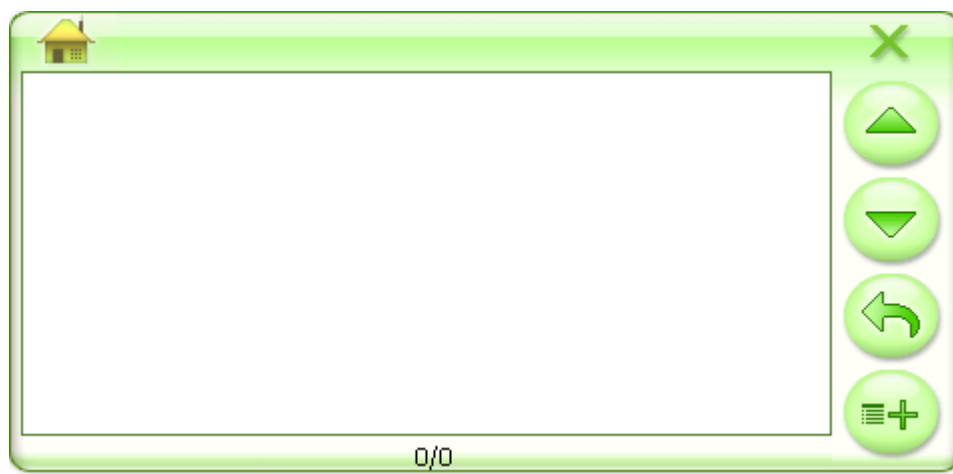
Click " " to increase volume and " " to decrease the volume.

## AV OUT

After switch on the power, connect the AV cable which already connected well with the outside equipment to the AV socket, then the outside screen will display the same interface as the GPS and will play the same sound.

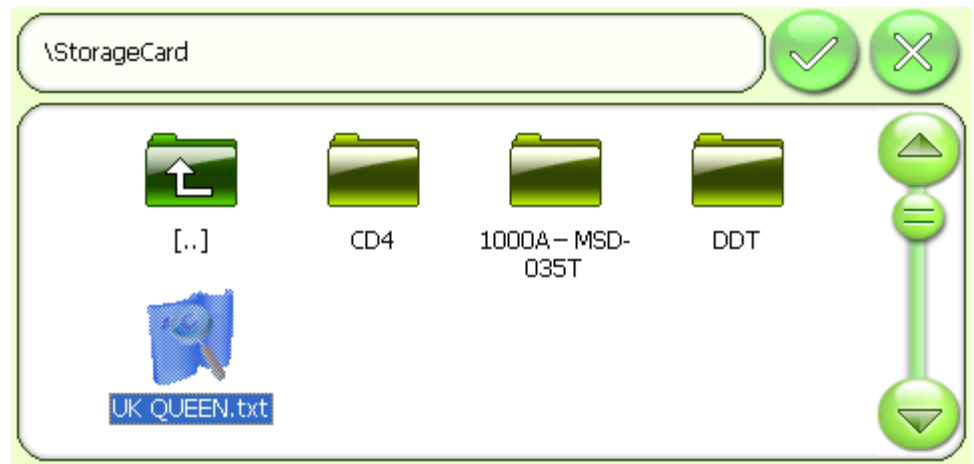
## E-book function (this function exists with Bluetooth function)

- ◆ Under the main menu, click " "to enter the text viewing interface, as the following:

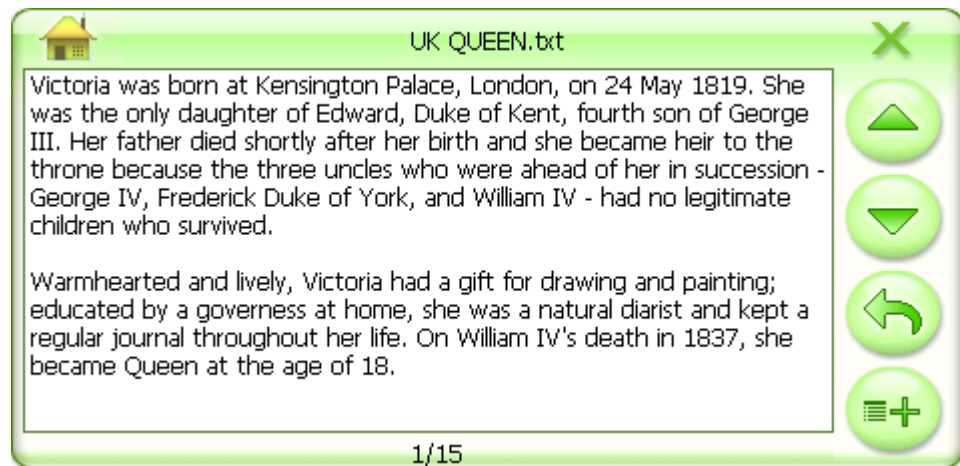


1. Click " " to choose the .TXT file you want in the following

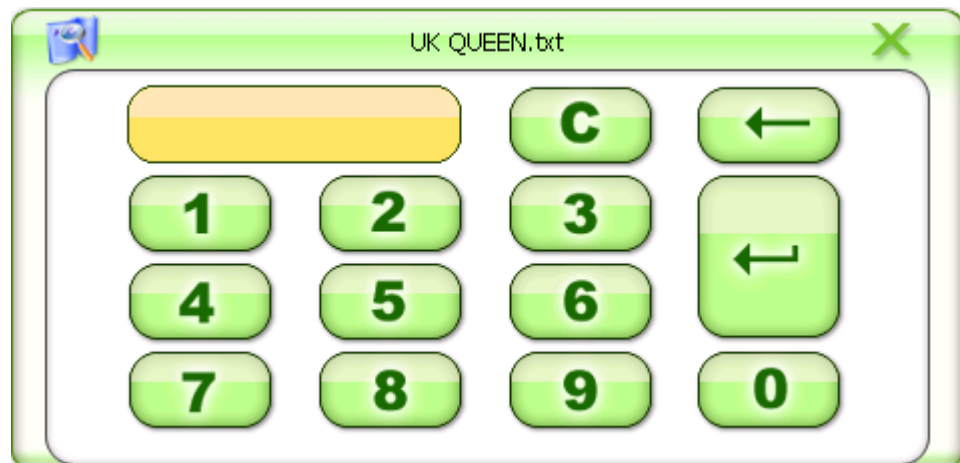
### sub-menu



2. Double click the file you want to enjoy it on the screen.

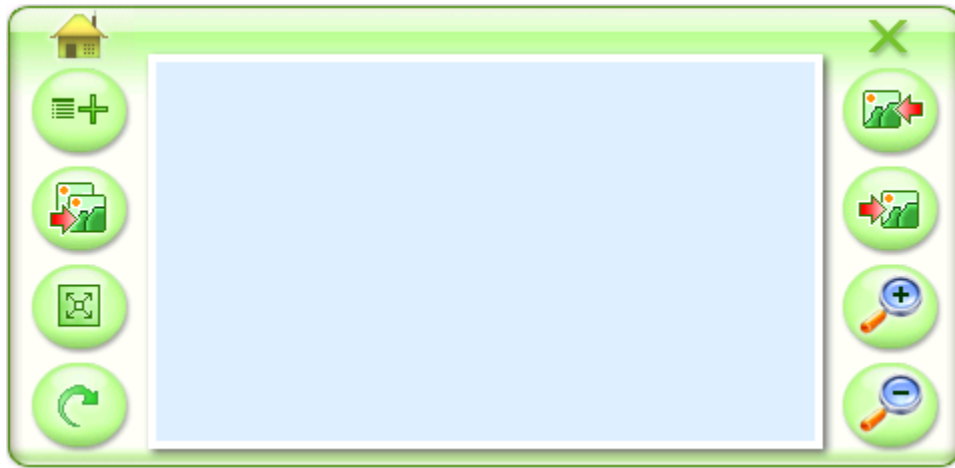


3. Click  to skip to the page you want directly, and  to confirm your choice.

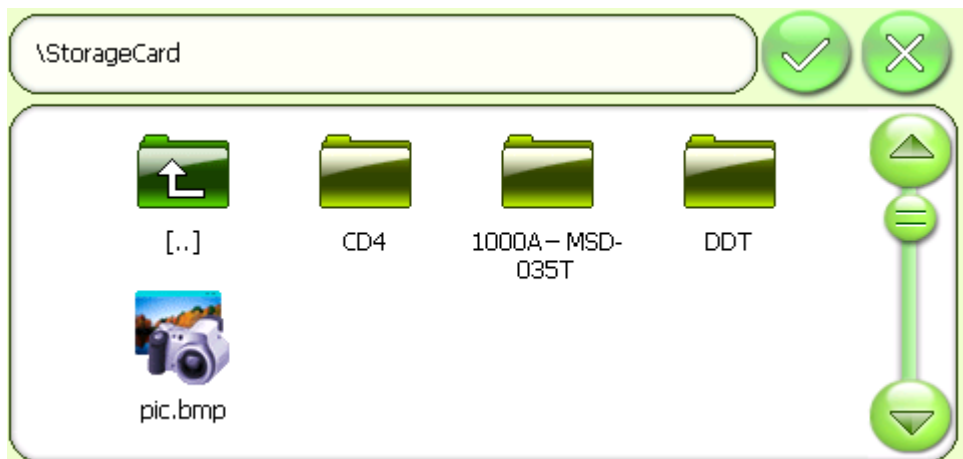


## Photo skimming:

- ◆ Under the main, click  to enter the photo skimming interface, as the following:



1. Click  to the following interface, and confirm the photo you want by double click.



2. Under the photo viewing interface, other bottoms as following:

Click  or  can get full screen

Click  to change the angle of viewing photo

Click  to view the pre-photo

Click  to view the next photo

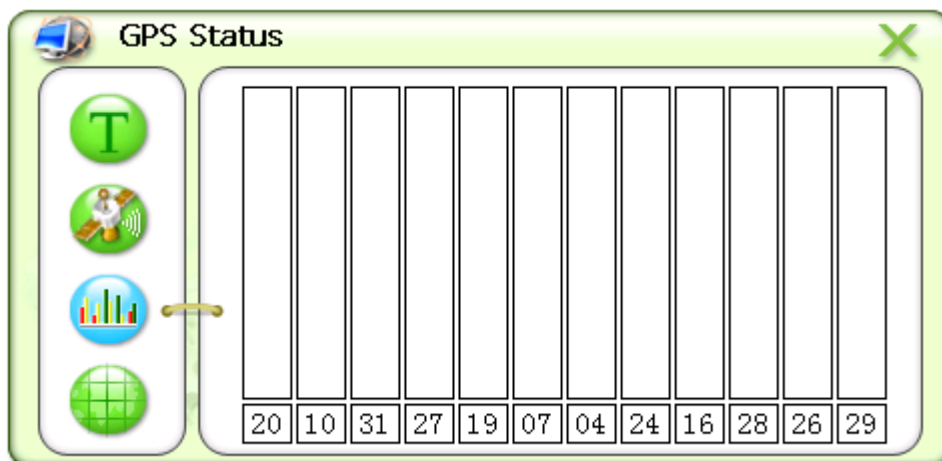
Click  to enlarge the photo

Click  to deflate the photo

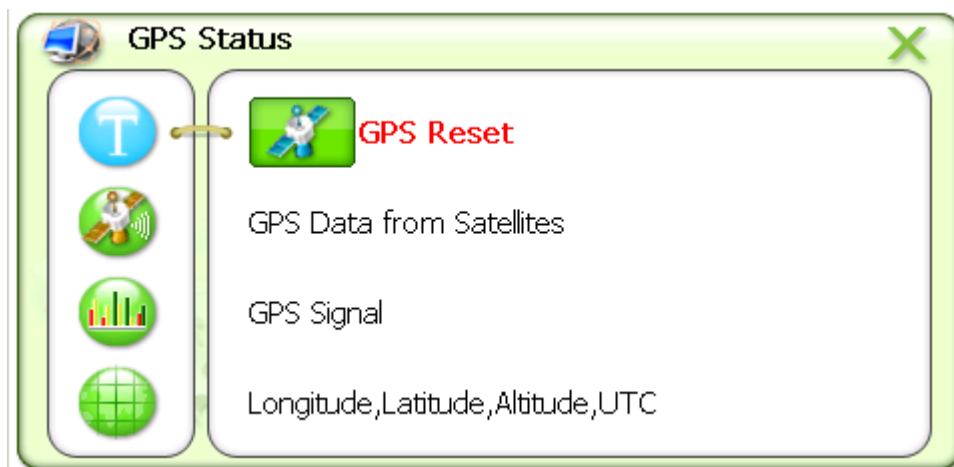
Click  to exit to the main menu

### GPS working condition:

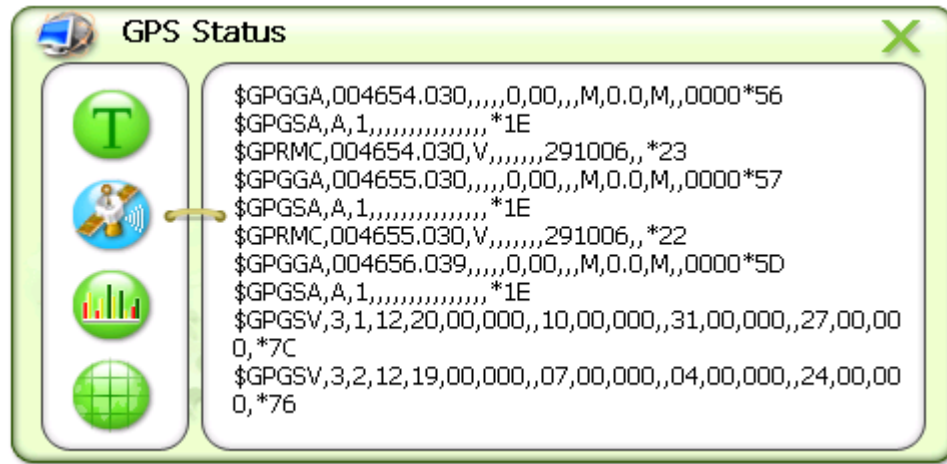
- ◆ Under the main menu, click " " to check the GPS working status



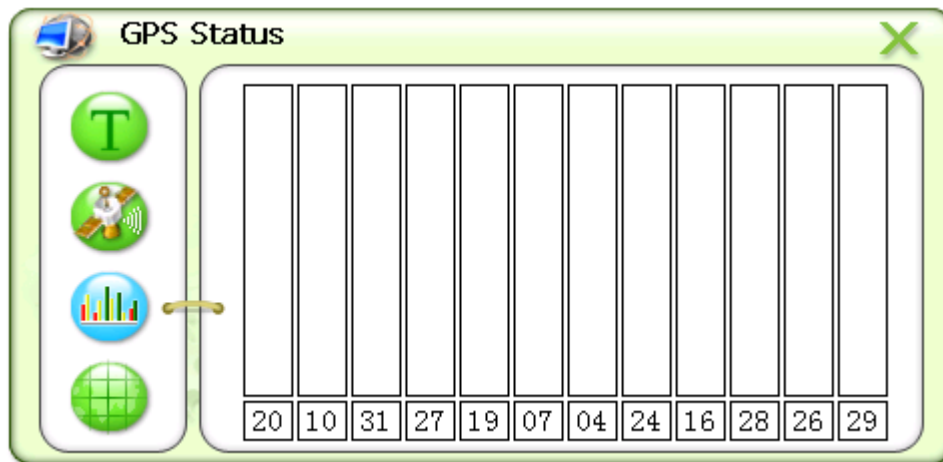
1. Click " " to enter the menu illustration interface, as the following:




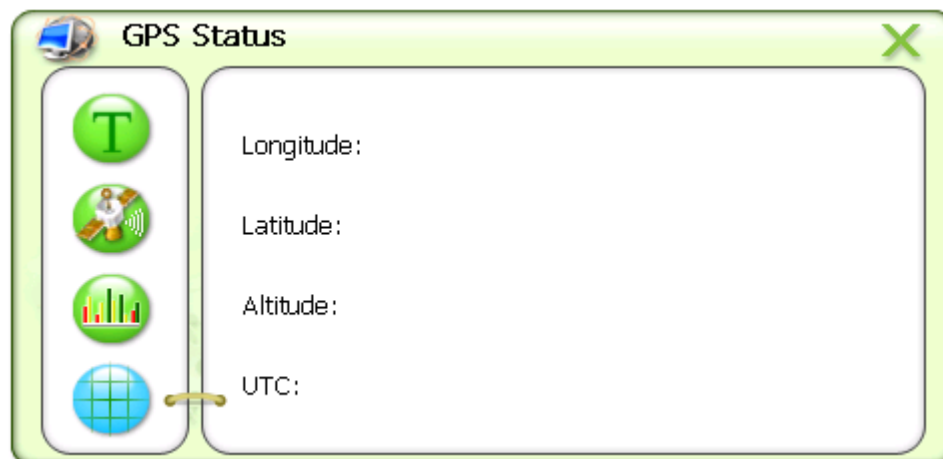
2. Click " " to enter satellite data interface, as the following:



3. Click “” to enter the satellite signal indication interface, as the following:




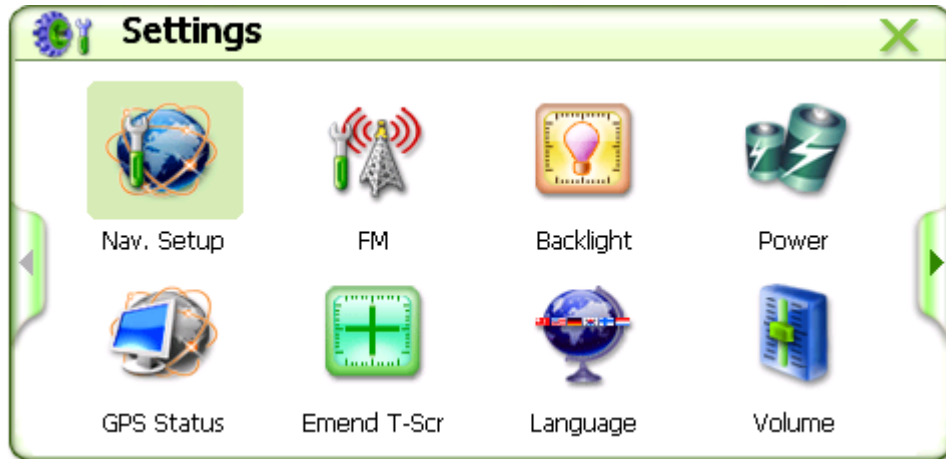
4. Click “” to enter latitude, altitude and time display interface, as the following:




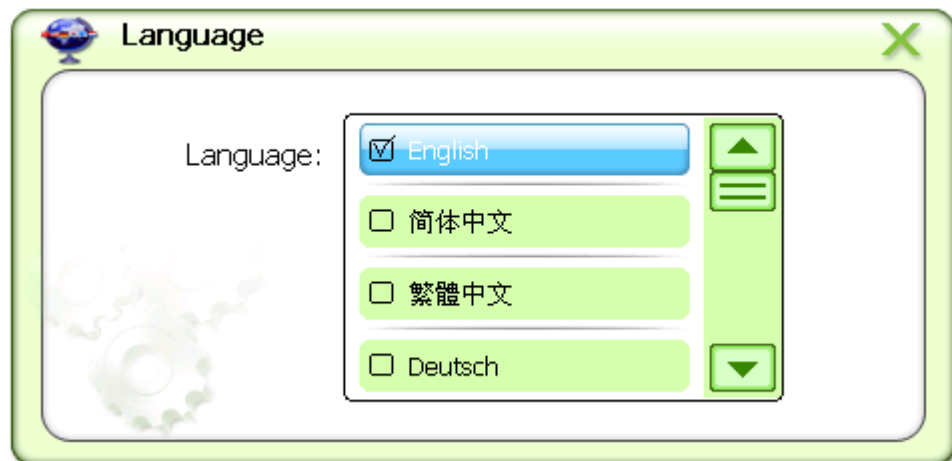
**Remark: you need test the GPS monitor at the open air, or there will be no signal can be received**

### Language choosing:

- ◆ Under the main menu, click  to the following sub-menu and choose language you want



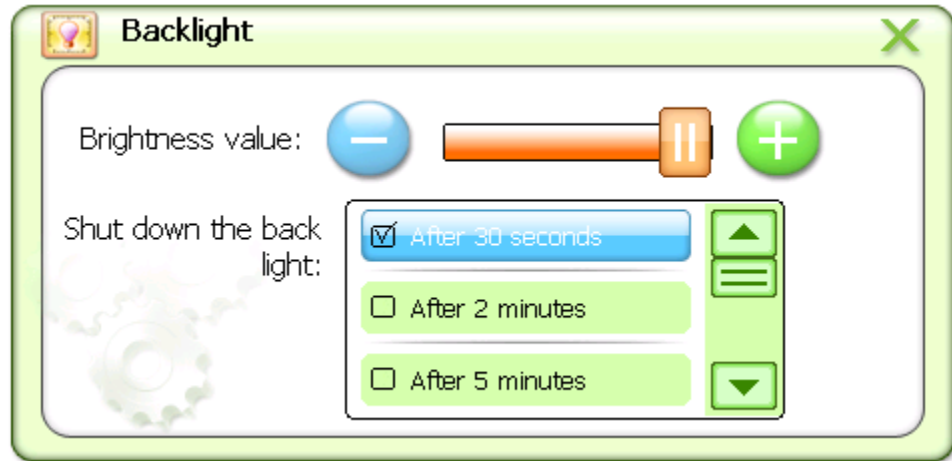
- ◆ click  "to enter the language choosing interface, then click and hold the glide bar to view the language list, click the language you want and exit to confirm









### Backlight setting:

- ◆ Under the system setting interface, click  to the relative sub-menu



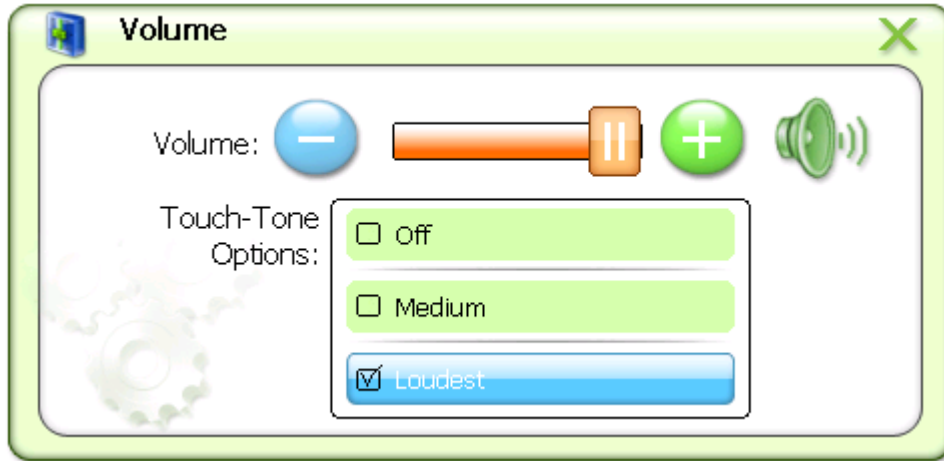



1. Click  or  to adjust the brightness, you can also do it by click and hold the glide bar.
2. Click  or  to choose the automatically dark time, you can also do it by click and hold the glide bar.
3. Click  to confirm your choice and exit to the last menu.

- ◆ Under the system setting interface, click  to enter touch screen calibration mode, press the cursor (the middle point) according to the displayed instruction till it removes, keeping pressing till an "ok" displayed on the screen. After finished the emendation, the system will remember the data forever, so it is no need to calibrate each time (should be set well before sold out from the factory)

### Volume adjustment:

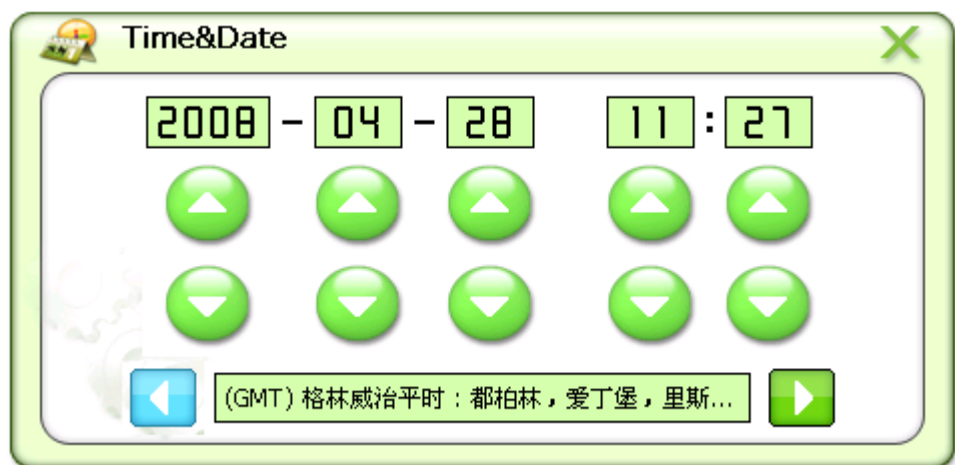
- ◆ Under the system setting interface, click  to enter the volume adjusting interface, as the following:






1. Click  or  to adjust the speaker volume, you can also do it by click and hold the glide bar.
2. Click  to make the speaker off, again to make it on.
3. Choose the Touch-Tone Options, click  to confirm your choice and exit from the current interface.


**Time set:**

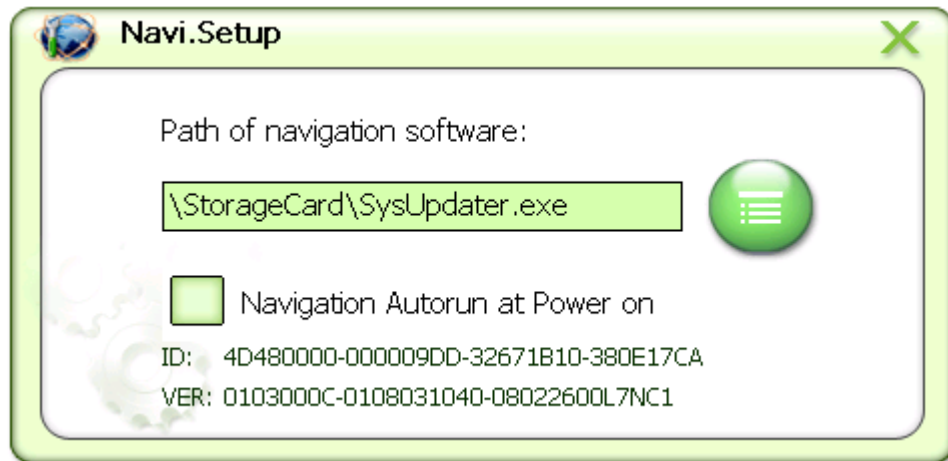
- ◆ Under the system setting interface, click " "to enter time setting interface, as the following:



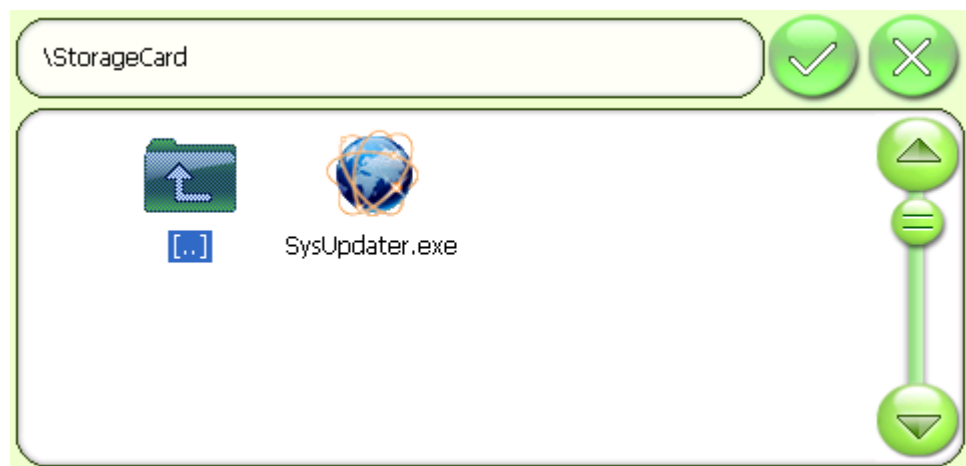
- Click the relative icon which needed to be adjusted, click ,  to choose the time zone you need,  to confirm your choice and confirm.



## Run navigation firmware:

- ◆ Under the working status, insert the SD card which already uploaded the map into the card slot, click  to enter the system setting interface, as the following:



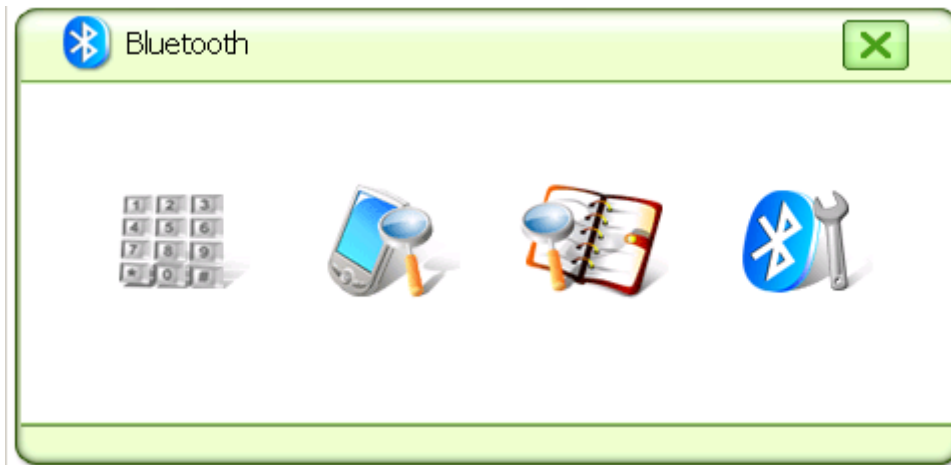
1. Click  to the following interface, choose an ".exe" file and double click to it to confirm.



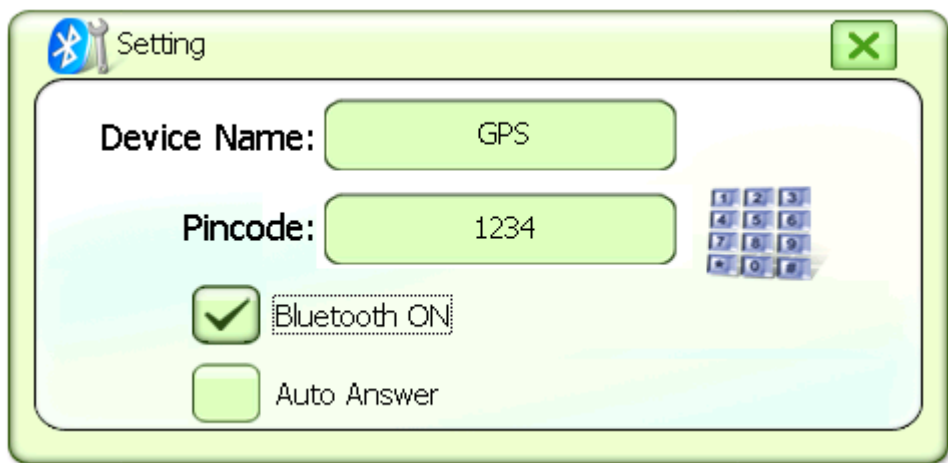
2. Click  go back to the main menu, double click  to enter the navigation interface. Detailed operations for navigation please refer to the NAVIGATION SOFTWARE MANUAL.

## Bluetooth (optional)

Under the main menu, click  to enter the sub-menu as the following



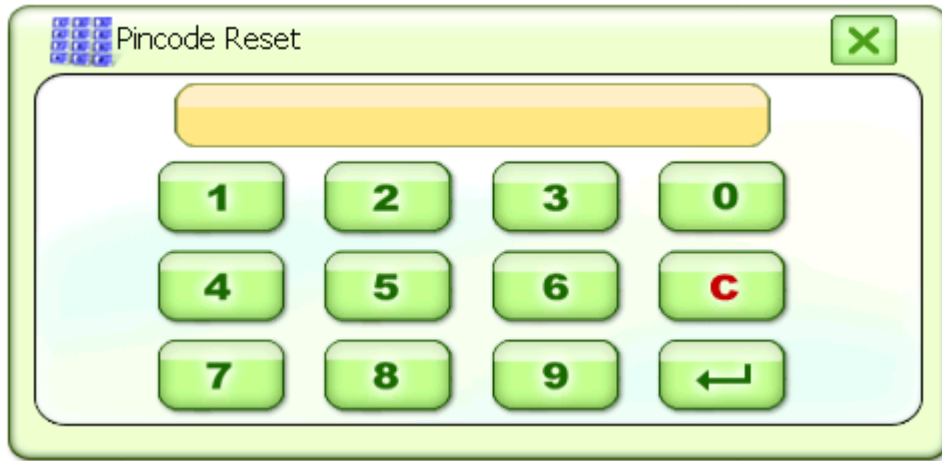
Click  to set PIN code



Maintenance Bluetooth **to keep the Bluetooth on when GPS in working condition.**

Automatic Answer **to set the Bluetooth as automatically answer.**

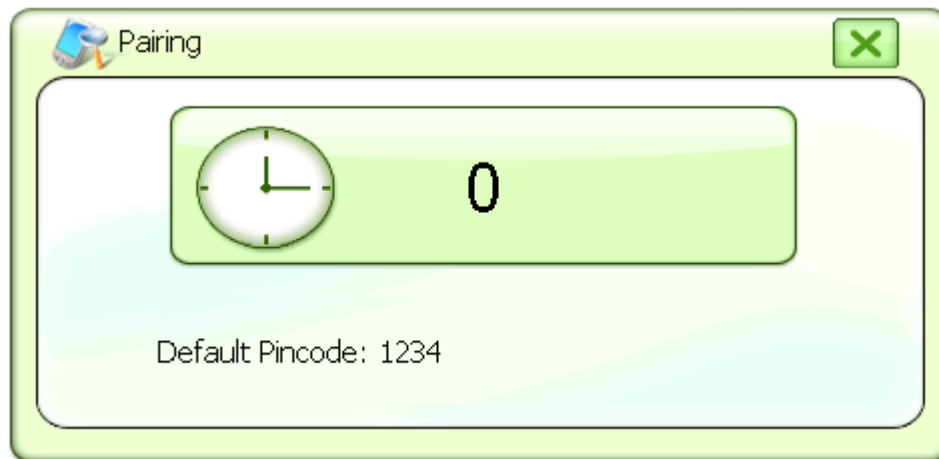
Click  to enter the inputting sub-menu



After setting, click  to exit.

#### ◆ Match with Bluetooth device

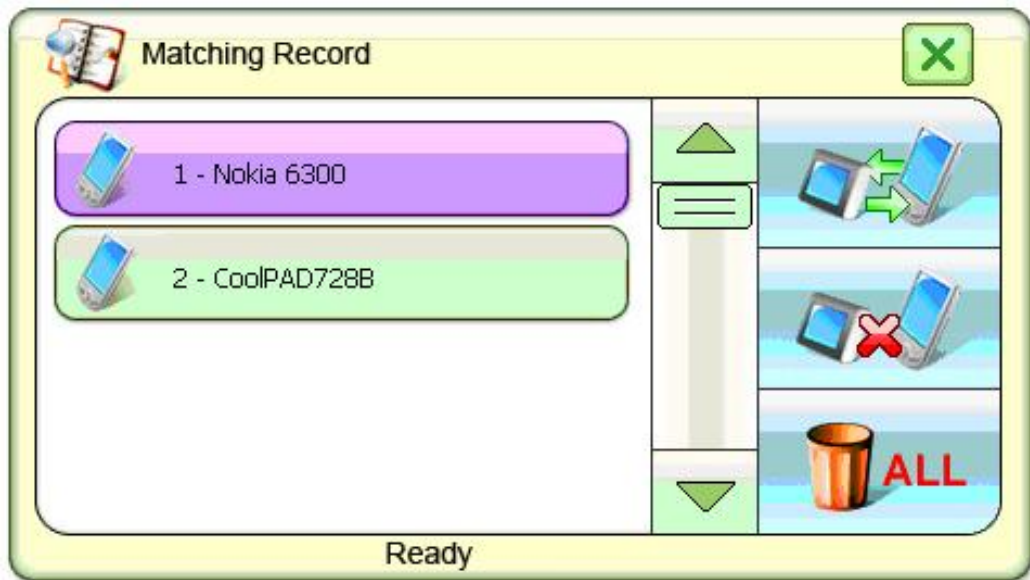
Under the Bluetooth interface, click  to do the matching



It just can be found by others, users should use his own cell phone to search Bluetooth device, and user will be required to input the secret code, default as 1234. The device will remember the matched cell phone forever, as long as Bluetooth of cell phone was on, active the Bluetooth in this device can achieve matching automatically.

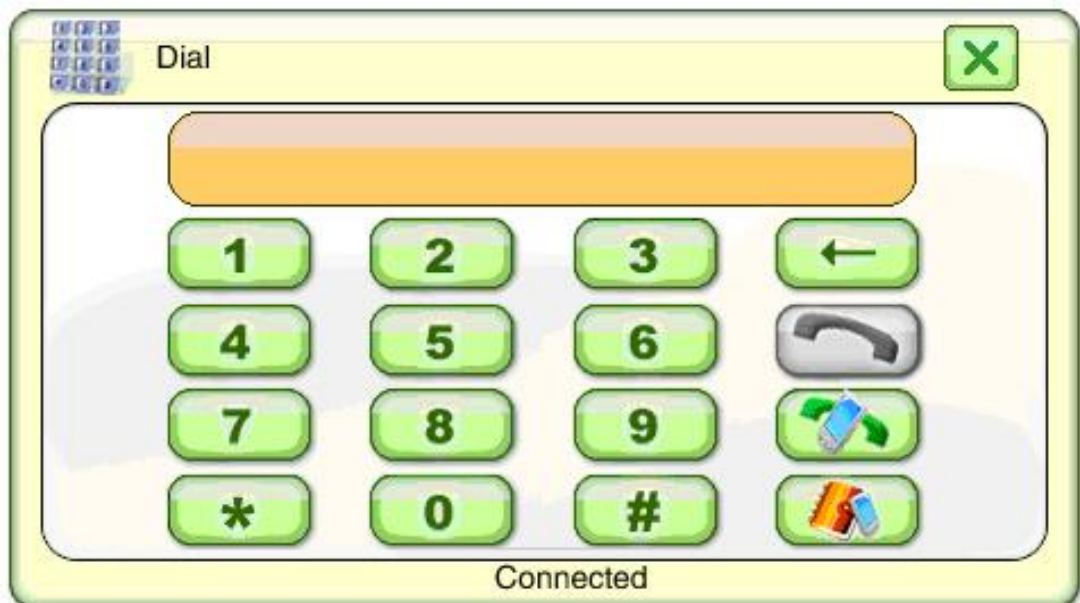
#### ◆ Bluetooth Management

Under the Bluetooth interface, click “” to check all the devices which had been matched before .



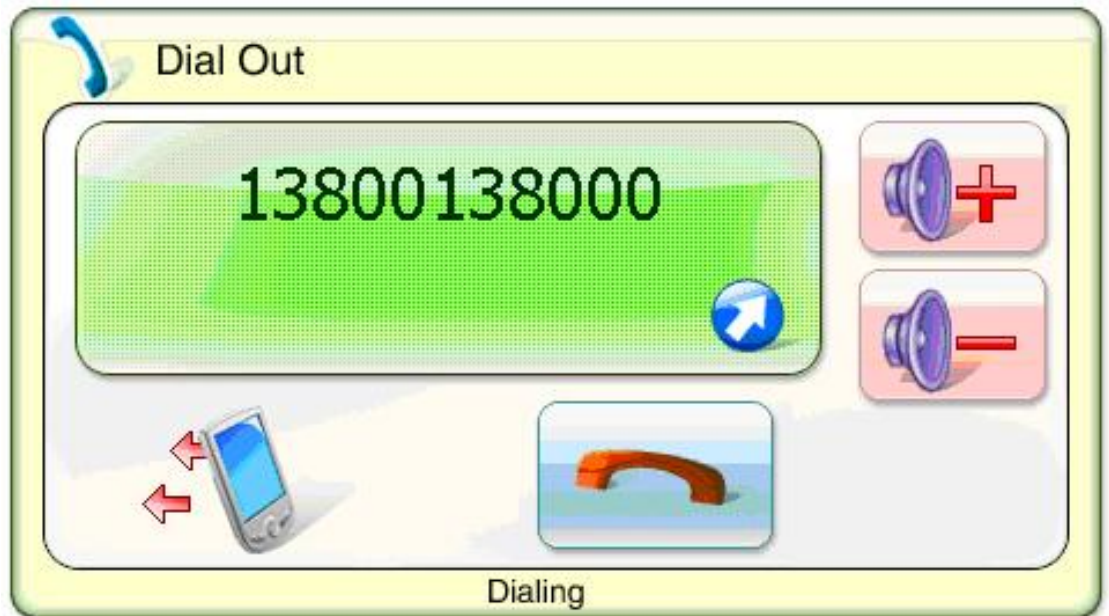
 connect the chosen device, 
  cut off the chosen connection, 
  ALL delete all the Bluetooth device




Under the Bluetooth connecting condition, click “” to enter dialing sub-menu



 backspace, 
  pick up the phone, 
  redial, 
  record the communication

**Dialing out**



 hang off, 
 
 adjust the volume

### In communication



 phone number you are dialing and the communication time, 
  hang off, 
 
 adjust the volume.

Picking up status (cell phone has been matched well with this device)




611104 incoming phone show  hang off  pick up

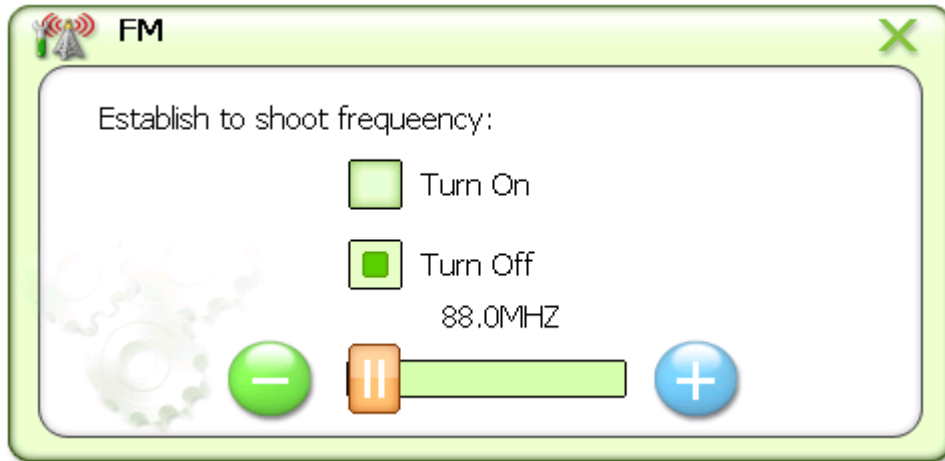
Click "MENU" can make you back to the main menu no matter what condition the GPS in.




## 8. FM transmitter

You should connect with DC12V power adaptor before use this function.

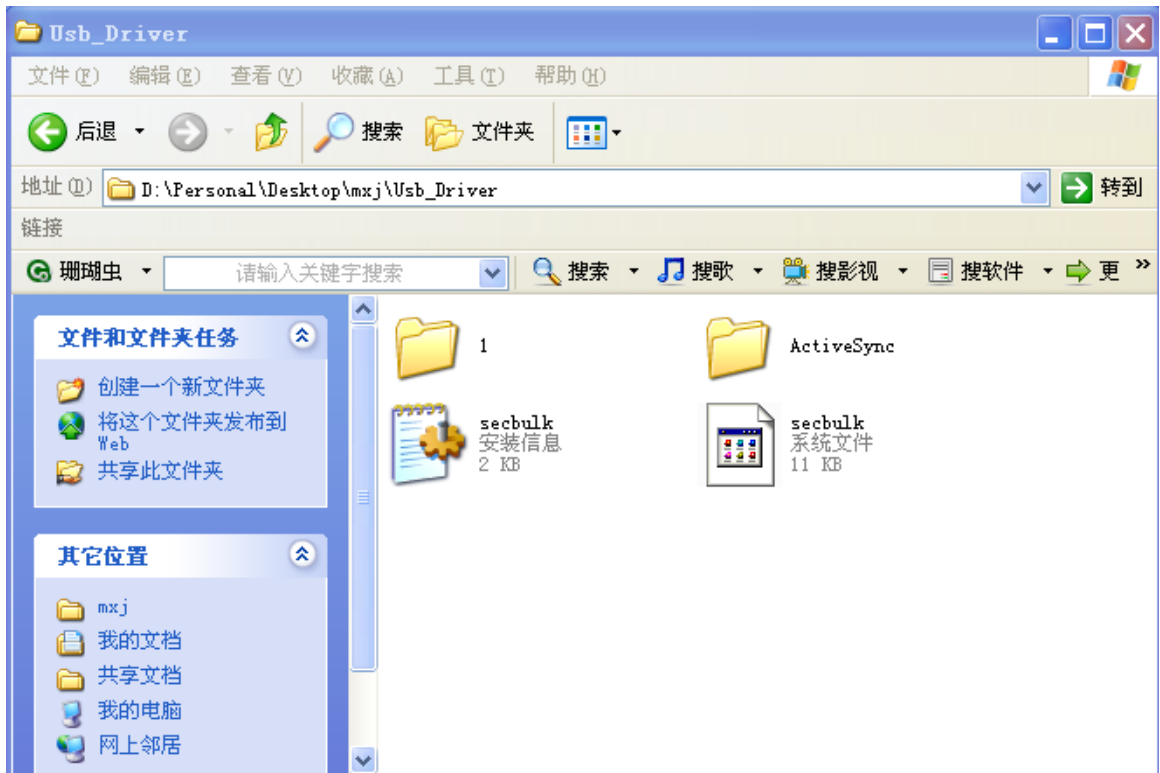
- ◆ In the System setting interface, click "  " to enter into FM setup interface, as below shows:





You can set "FM transmitter frequency" to "on" or "off", click "  " and "  " to set transmitter frequency. After setup, click "  " to exit; meanwhile, please set your car's FM transmitter frequency to a certain point, then your car's acoustics can receive the audio frequency which transmits from GPS.

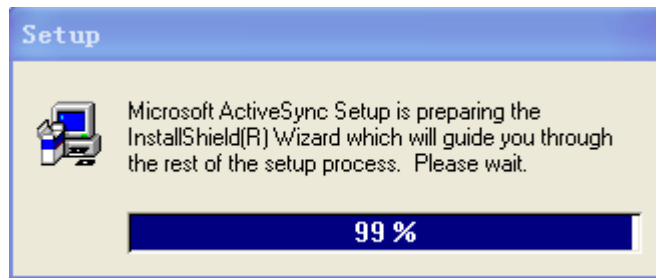
## 9. Instruction for USB ActiveSync



Double Click"  ActiveSync "Enter into



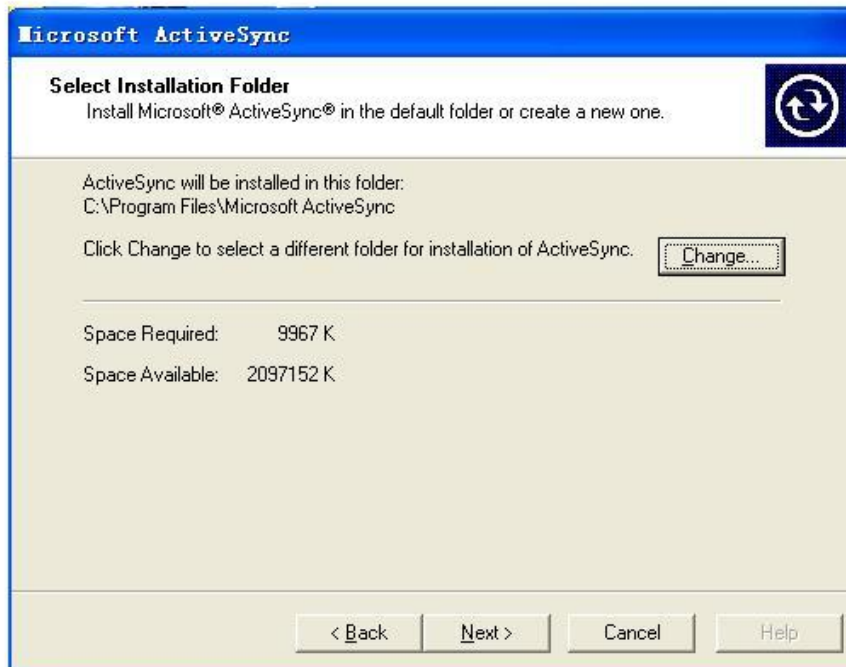
Double Click  "MSASync  
Win32 Cabinet Set  
Microsoft Corpor." Auto Install :



After finished, next interface;



Click  Then, enter :



Choose "  " ; then "  " to enter into next interface :



Click "  " (next) :



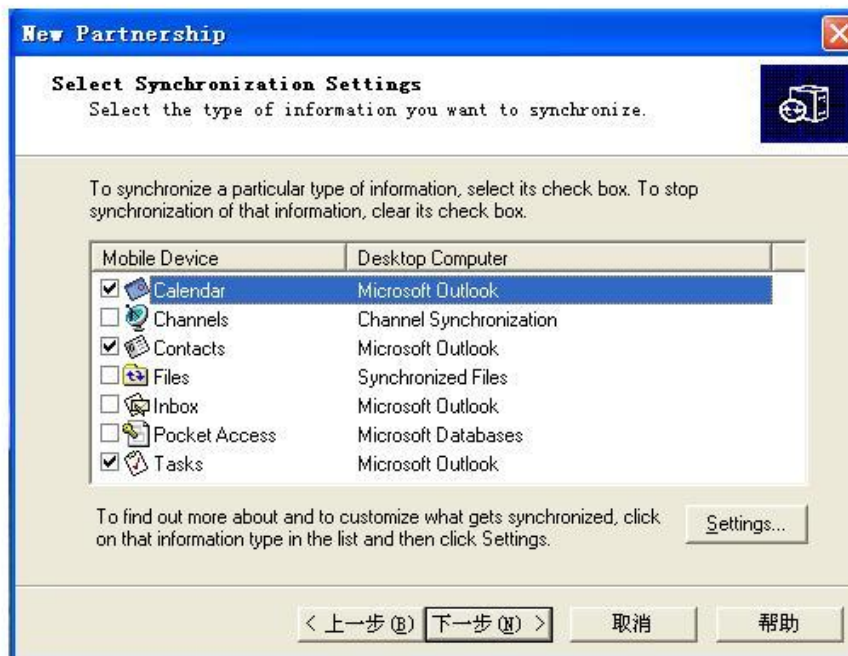
Click "  " :



Click "  " :

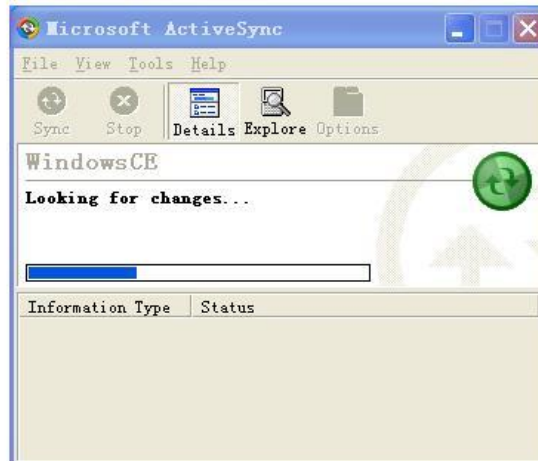


Click “” :



Click “” :



Enter into:

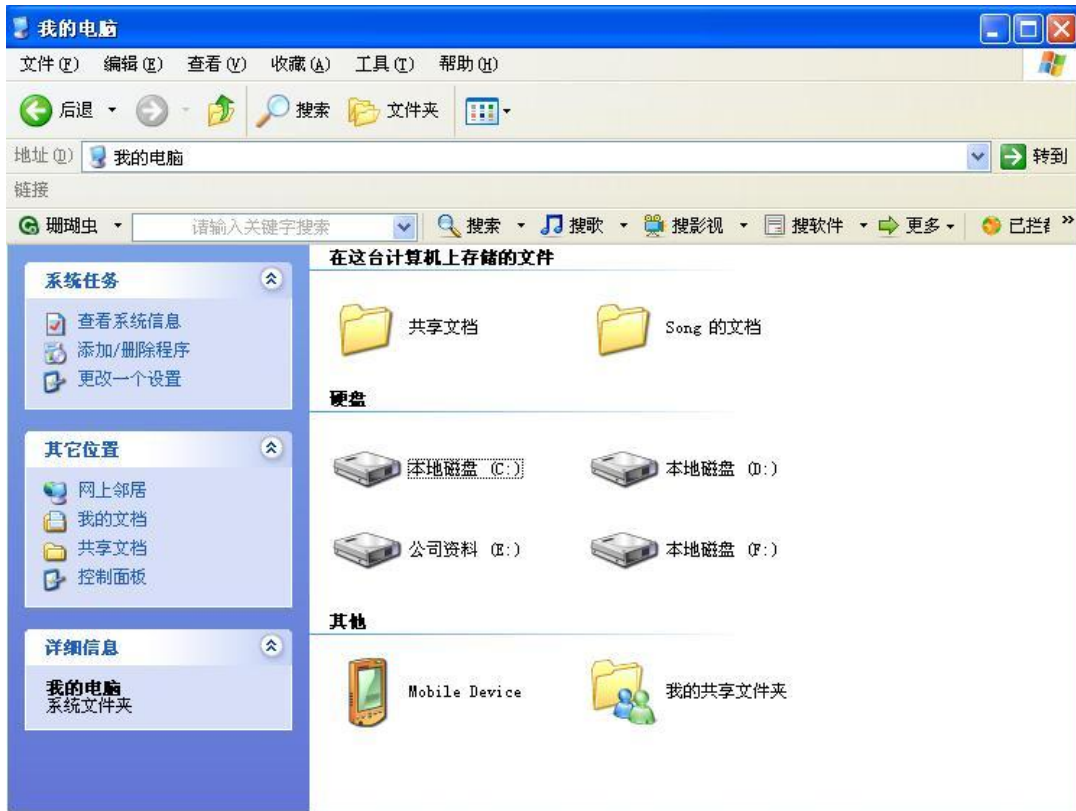


Then,

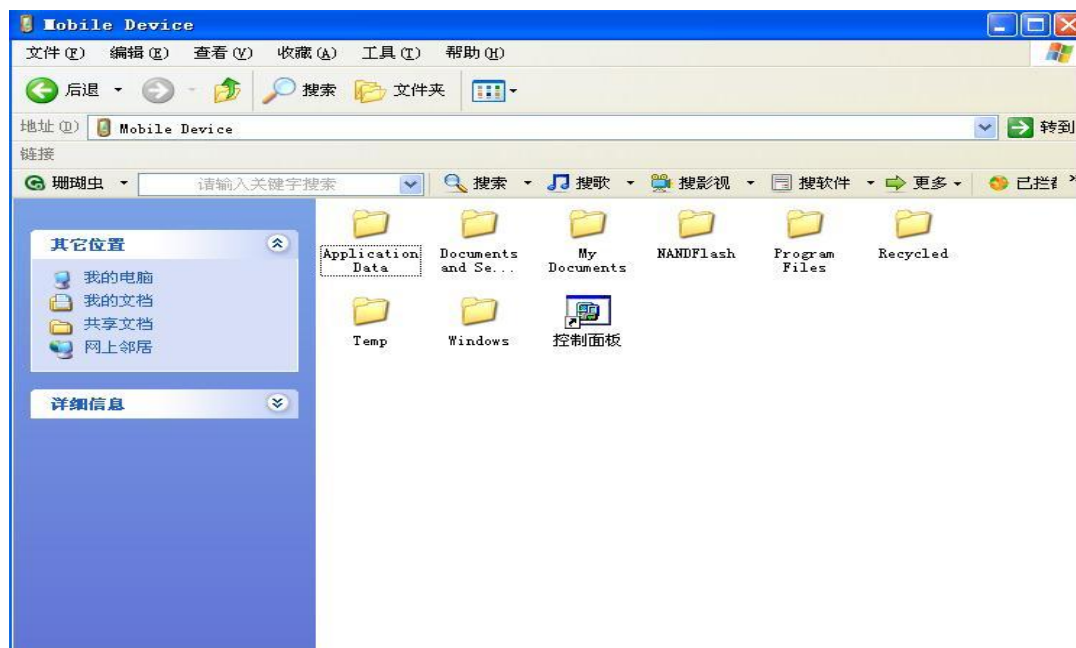


After finished, your PC will show : "  "

Then, you can see "  "to find"  " "



Double Click "  Mobile Device "to enter into :

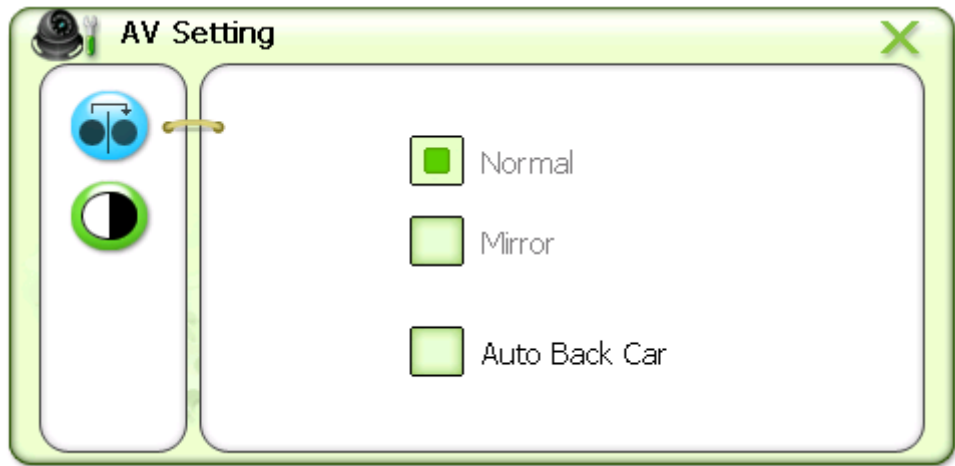


Then, you can copy, delete, etc directly.



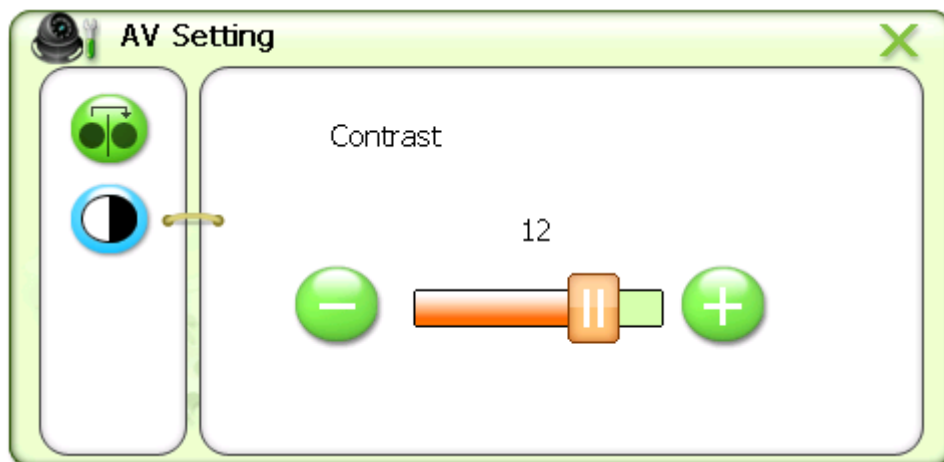
## 10. Back viewing function:

It can induce parking condition automatically. Under the console interface, tap AV setting icon“” to enter the sub menu:




Choose “parking automatically” , exit to save your choosing.

Tap“” to mount displaying contrast as the following :



- ◆Once there is parking signal been inputted to AV input port, system will show the parking video automatically. During this process, all keystrokes out of work, after parking, screen back to navigation automatically.
- ◆This function just be effective when GPS in working time. Please do not turn the GPS off when parking, and shortly press “power” to make it resting when off board.
- ◆Under the standby status, system will be woke up when there is parking signal inputing, screen shows the video, GPS been standby again after it.

## 10.1 Setting Illustration :

Under console interface, tap “  ” to enter the AV video interface; insert the two pins (CVBS and AUDIO) to AV inputting hole. At the mean time, screen displaying and audio will be switched to exterior AV inputting signal automatically.

## 10.2 Other settings

Under the AV video interface, tap anywhere on the screen to release the AV video OSD setting menu out. From left to right, functions as following:

- **AV/GPS switch**  
Choose GPS or AV mode
- **Displaying brightness**  
Tap “+、-” to mount the displaying brightness
- **Displaying contrast**  
Tap “+、-” to mount the displaying contrast
- **Displaying saturation**  
Tap “+、-” to mount the displaying saturation
- **AV color setting**  
Tap “+、-” to mount the color
- **Video displaying scale and menu language**  
Video displaying scale could be settled as 16:9 or 4:3; menu could be Chinese and English,

## 11 Important

- **Avoid hot, damp and dusty**
- **Remove slightly**
- **Keep the antenna smooth and point to the shy**
- **If there is metal film outside he car, we suggest you use the extension antenna**
- **The rim of all the marks is in orange color when being chosen, and the marks will be in orange color after been chosen.**

## 12 Trouble shooting

<b>Problem</b>	<b>Reason</b>	<b>Solution</b>
<b>Can not turn on the navigator</b>	<b>Not be used for a long time; Car lighter adaptor not connect well</b>	<b>No power, need to be charged; Connect the car lighter adaptor well</b>
<b>No signal</b>	<b>At sheltered place</b>	<b>Change place without sheltering</b>
<b>Power used off quickly</b>	<b>In very low temperature when working Battery is no good Battery is aged</b>	<b>Avoid too low or too high temperature Use better battery or adaptor</b>
<b>Can not enter navigating mode</b>	<b>The navigation set may be not right</b>	<b>Set it again</b>
<b>Can not display clearly</b>	<b>TFT LCD screen is dirty</b>	<b>Clean the screen</b>
<b>Without sound</b>	<b>The volume is at the lowest condition</b>	<b>Set the volume</b>
<b>Touch screen function is abnormal</b>	<b>Touch screen function is not emendated well</b>	<b>Emendate it again</b>
<b>Date/time display is wrong</b>		<b>Set it again</b>
<b>All buttons are can not work</b>	<b>Key LOCK is at ON condition</b>	<b>Click "RESET" to refresh machine put LOCK to OFF</b>

### Remark:

- 1. If there no AV OUT and data updating port, please change the relevant introduction**
- 2. If there is no printing on the machine, please renew the photo**