

# **Embedded Computer User Manual**



## **Safety defeneded:**

Properly maintain your system to guarantee its service life and reduce the damage risk.

- It should avoid the humidity and extreme temperature when using.
- Avoid being revealed making equipment for a long time under shoot straight at sunlight or intense ultraviolet ray lamp light.
- Avoid heavy impact or drop onto the ground.
- The LCD screen is very easy to shave a wound, avoid crashing please. Be sure not to use other sharp article to bump against touch screen.
- The fuselage is external, close a power source, allocate away mains lead if should be clean, quality cloth cleans with tiny wet soft when clean screen, in order to not lose trifling soft of cotton please.
- Strictly forbid the machine presumptuously dismantling or keeping the machine, otherwise, possibility damage in repair.
- Do not place with your equipment or accessory and other inflammable liquid, the gas or other explosive articles place together, to avoid happening dangerous.

# Content

<b>PRODUCT DESCRIPTION .....</b>	<b>3</b>
<b>Introduction.....</b>	<b>3</b>
<b>Optional Functions.....</b>	<b>3</b>
<b>Parameter .....</b>	<b>4</b>
<b>Parts Description.....</b>	<b>5</b>
<b>Extended Cable Specification.....</b>	<b>7</b>
<b>SIM Card &amp; Memory Card Instructions.....</b>	<b>8</b>
<b>Basic Operation.....</b>	<b>8</b>
<b>Click and Slide.....</b>	<b>8</b>
<b>Long-press and Drag.....</b>	<b>9</b>
<b>Delete.....</b>	<b>9</b>
<b>MENU.....</b>	<b>10</b>
<b>Icon Bar.....</b>	<b>10</b>
<b>MENU SETTING.....</b>	<b>10</b>
<b>Accessories.....</b>	<b>17</b>
<b>Trouble Shooting.....</b>	<b>18</b>
<b>Power Problem.....</b>	<b>18</b>
<b>Screen Problem .....</b>	<b>18</b>

# PRODUCT DESCRIPTION

## Introduction

- ◆ 9.7" 4:3, 1024×768 high resolution, Touch screen control;
- ◆ Comply with IP 64 Waterproof Standard;
- ◆ Android 4.3/5.1 OS (Windows CE 7.0 or Linux 3.0.35 OS for optional);
- ◆ Micro SD card storage makes the data reliable, convenient and easy for expansion;

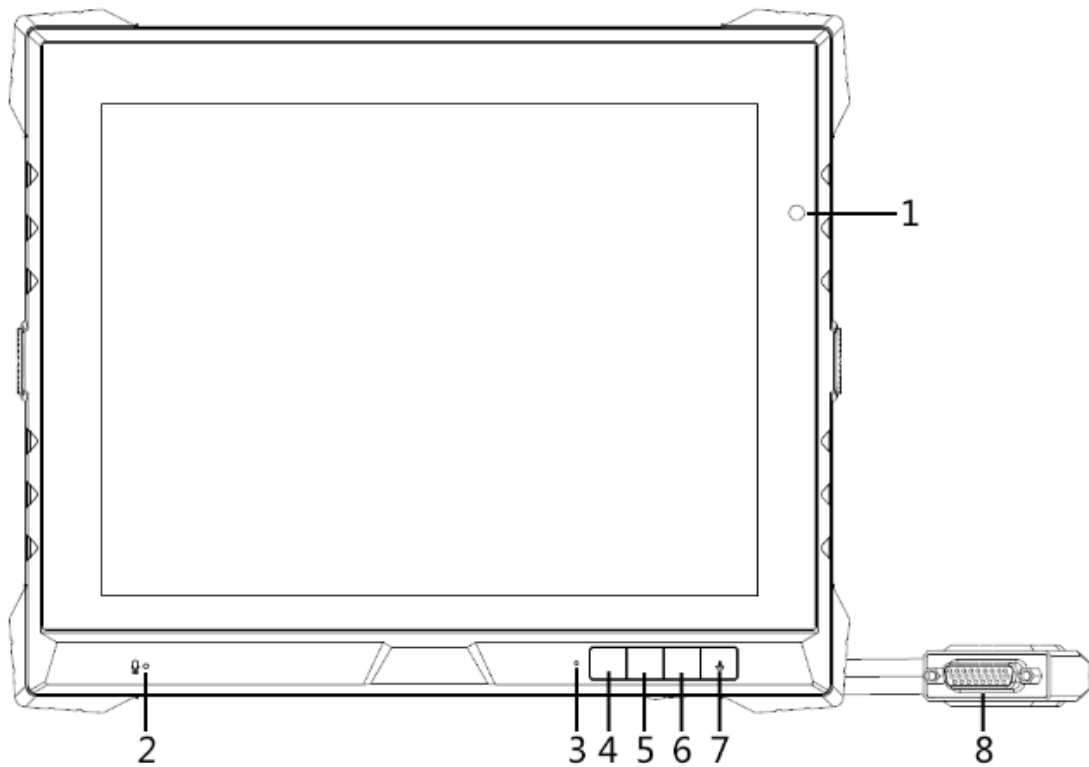
## Optional Functions

- ◆ GPS (external)
- ◆ 5.0M camera (built-in)
- ◆ Microphone
- ◆ Wi-Fi 802.11 b/g/n (built-in)
- ◆ 3G/4G (built-in)
- ◆ Bluetooth (built-in)
- ◆ 5400mAh Li-ion battery (built-in)

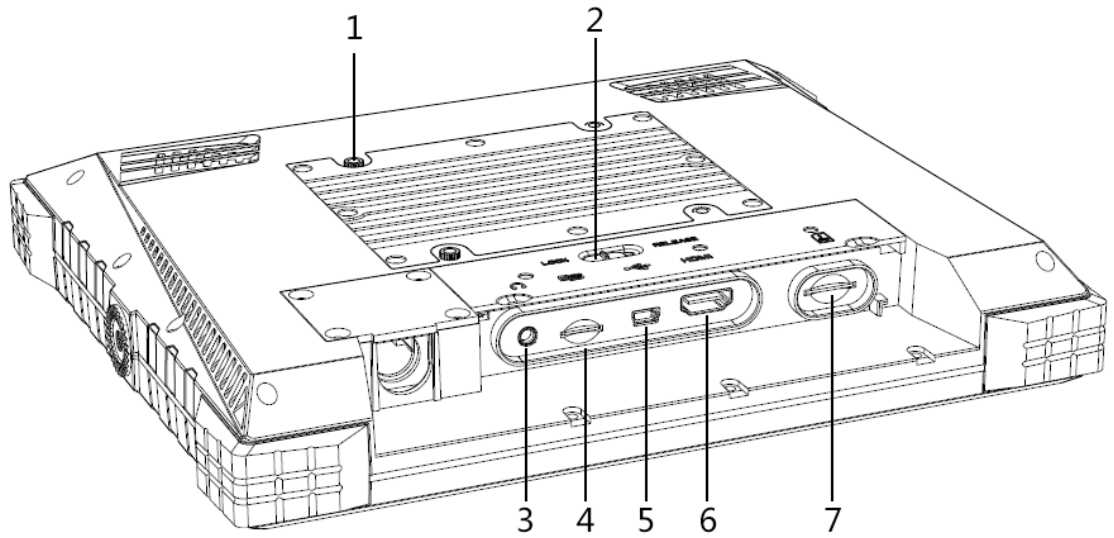
## Parameter

Configuration	Parameter		
<b>System configuration</b>	<b>CPU</b> Freescale iMX6q Quad core 1.0GHz <b>Flash</b> 8GB <b>RAM</b> 1GB (Optional: 2GB) DDR3		
<b>Interface</b>	Micro SD card, SIM card USB Device 2.0 , USB host 2.0 Earphone output port DC power input 4×RS232 interface (optional RS485/RS422 interface) 4×Gpio input, 6×Gpio output HDMI Ethernet and POE interface		
<b>Touch Panel</b>	Capacitive		
<b>Display</b>	9.7" LVDS		
<b>Screen Resolution</b>	1024×768		
<b>Brightness</b>	350cd/m <sup>2</sup>		
<b>Contrast</b>	900:1		
<b>Viewing Angle</b>	178 ° 178 °(H/V)		
<b>Power supply</b>	DC 9-36V	With Battery	DC11-36V
<b>Power Consumption (Normal mode)</b>	≤9W		
<b>Power Consumption (Charging mode)</b>	≤24W		
<b>Working Temperature</b>	-20°C -60°C		
<b>Storage Temperature</b>	-30°C -70°C		
<b>Dimension (LWD)</b>	252 × 511 × 37 (mm)		
<b>Weight</b>	1340g		

# Parts Description

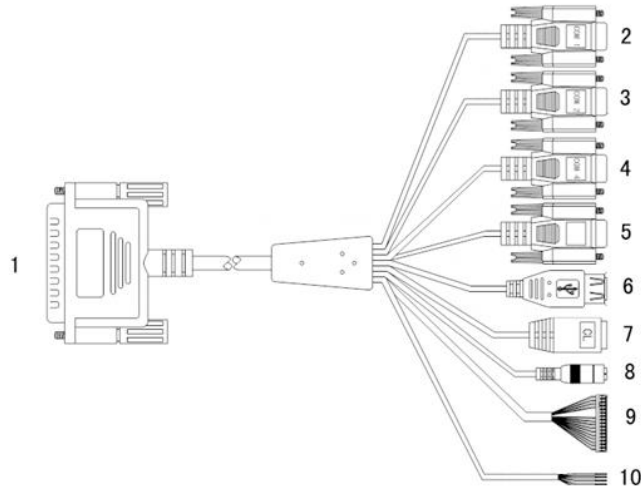


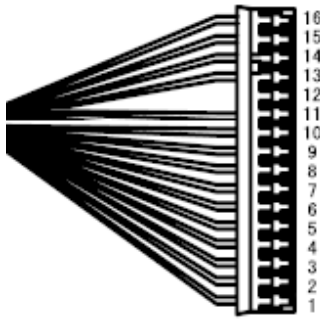

1. Camera (optional)
2. Microphone
3. Power indicator:  
Red light: Battery charging;  
Green light: Battery charging completed or connecting with DC adapter.
4. F1 User-definable button.
5. F2 User-definable button.
6. F3 User-definable button.
7. Power on/off: Long press to power off.
8. Extended cable.



1. 75MM VESA.
2. Cover switch.
3. Earphone jack: to connect with earphone.
4. Micro SD card slot: insert micro SD card to store pictures and other data.
5. Mini USB port: To connect with USB cable.
6. HDMI out.
7. 3G/4G card slot: insert 3G/4G SIM card to connect with wireless network.

# Extended Cable Specification



No.	Item	Specification						
1	Convertor	To connect with device cable						
2	Com 1 serial port	RS232 serial port						
3	Com 2 serial port	RS232 serial port or GPS port						
4	Com 4 serial port	RS232 or RS422 serial port switch						
5	Serial port	RS232 or RS485 serial port switch						
6	USB host port	For data transmitting						
7	LAN port	For network connection						
8	Power	To connect with DC adapter						
9	 Gpio port	Gpio input (0~5V)	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>		
			Gpio_62	Gpio_56	Gpio_166	Gpio_84		
			Br&W	B&W	LG	P		
		Gpio output (0V or 5V)	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
			Gpio_67	Gpio_172	Gpio_45	Gpio_178	Gpio_93	Gpio_66
			W	Gr	Pu	Bl	G	Y
Gpio GND	<b>11</b>							
	B							
CAN	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>				
	CAN1H	CAN1L	CAN2H	CAN2L				
	O	R	Br	R&W				
10	 Definition port	RS422	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>		
			G (A)	Y (B)	O (Z)	R (Y)		

Ps: O "orange", W "white", R "red", Br "brown", B "black", LG "light green", P "pink", Gr "gray", Pu "purple", Bl "blue", G "green", Y "yellow".



# SIM Card & Memory Card Instructions

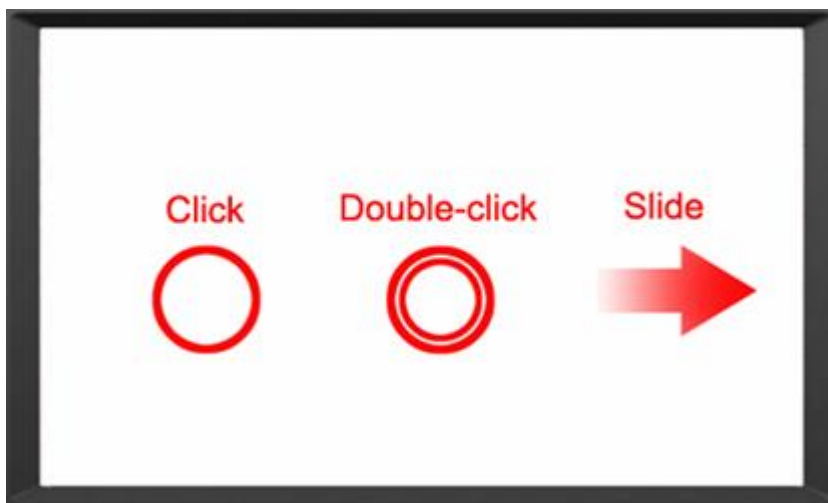
- ◆ In order to avoid damaging of the 3G/4G card & memory card, please insert the card smoothly and push slightly before you draw it out.
- ◆ The memory card will be heat after long time working.
- ◆ If you don't correctly use the memory card or cut the power when it being read, maybe some data will be damaged.
- ◆ If you don't correctly use 3G/4G card or cut the power when it being read, the network will be interrupted.
- ◆ If you do not use SD card for a long time, please put it into packing box.

**Insert the memory card as shown as follows,**

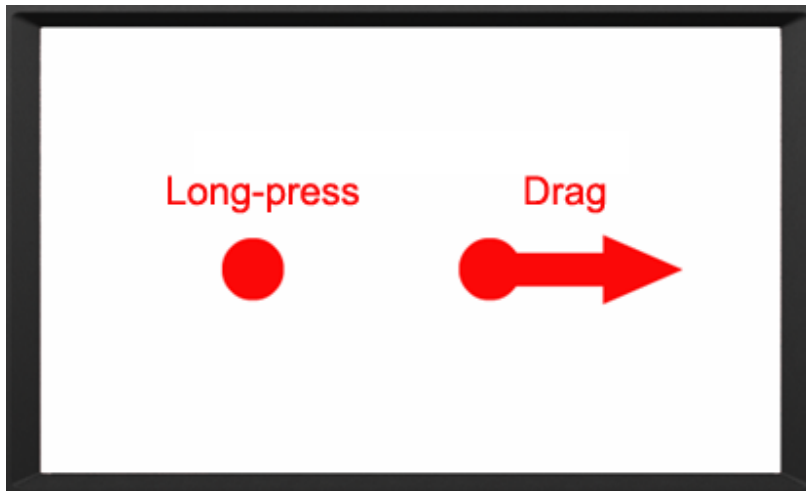
- ◆ Find the location of the 3G/4G card or memory card slot, part of the metal contacts facing down forward until it snaps into place.
- ◆ Insert the 3G/4G card or memory card smoothly to avoid of damaging.
- ◆ Please do NOT insert micro SD card into 3G/4G card slot, otherwise, micro SD will be hard to be taken out, and may be damaged.
- ◆ 32G micro SD supported.

## Basic Operation

### Click and Slide



## Long-press and Drag



## Delete











Long-press the application icon, and drag to the Home screen, then drop to the recycle bin on the right to delete this app.



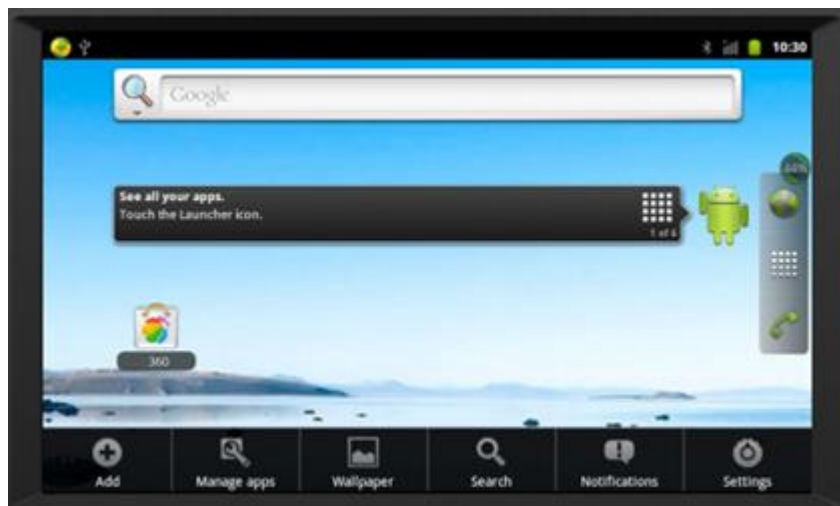
# MENU

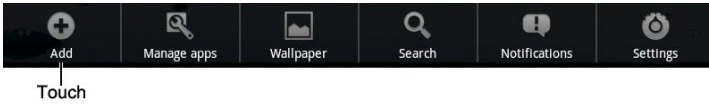
## Icon Bar

Icon bar shows on the top of screen.

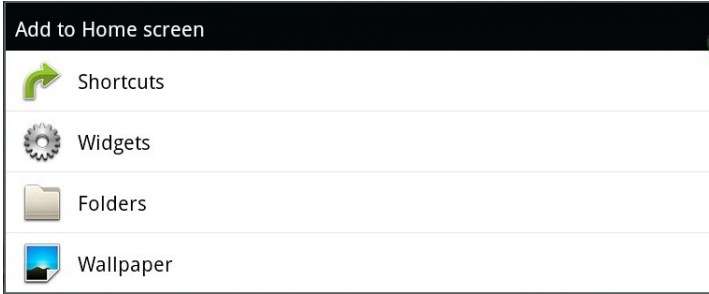
Icon	Name	Description
	USB	Status of USB device plugged-in.
	micro SD card	Status of micro SD card plugged-out.
		Status of micro SD card plugged-in.
	Wi-Fi	Wi-Fi signal connection and status of signal weakness or strength.
	Signal	Signal disconnection or connection failure.
		Signal connection and status of signal weakness or strength.
	Battery status	Battery and charging status
	Time	Current time

## MENU SETTING

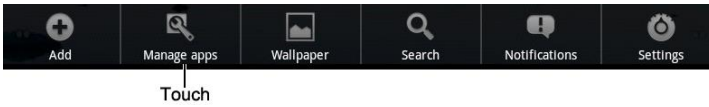





1. Click  to add.




1-1. Add application shortcut to Home screen according to user's need.




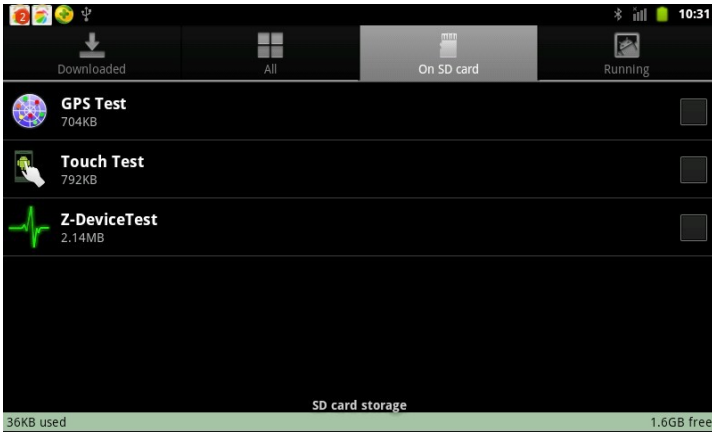
2. Click  to manage applications.




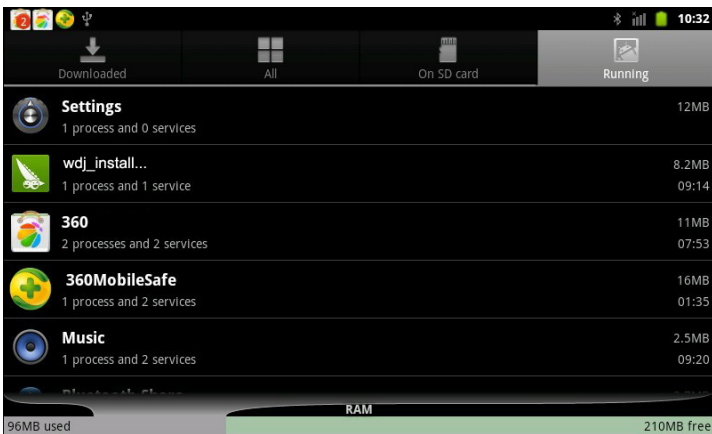
2-1. Click  download: To view and manage downloaded applications.




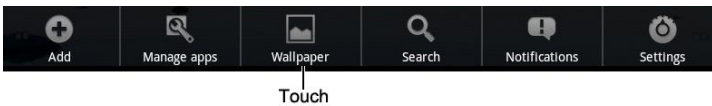
2-2. Click  All Applications: To view and manage all applications.




2-3. Click  SD Card: To view and manage application downloaded in SD card.



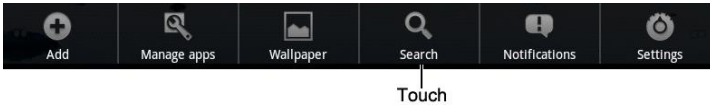
2-4. Click  Running: To view and manage applications which are running.




3. Click  to launch wallpaper.




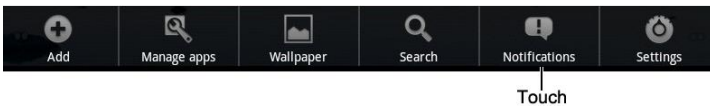
3-1. Choose favorite wallpaper.



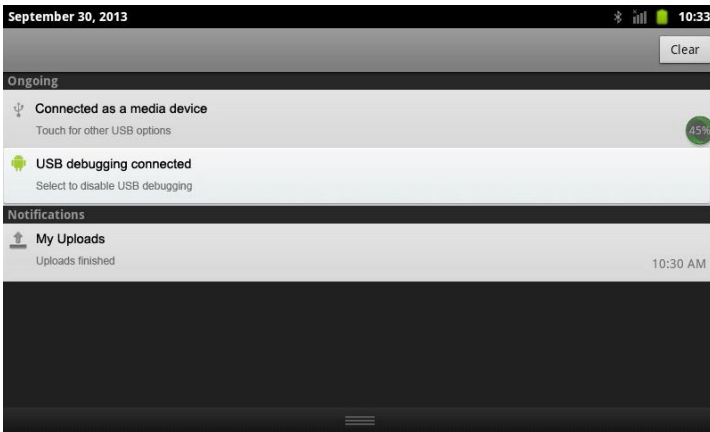
4. Click  to search.



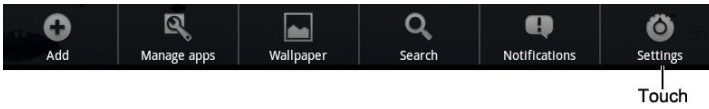
4-1. Input the keywords, and click  to search automatically.



5. Click  to launch Notice function.



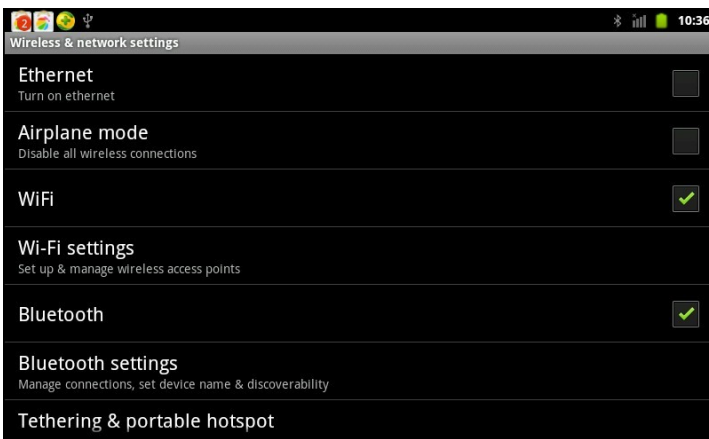
5-1. The notice bar shows system, running and error notice. (Notice bar hides on the top of screen, drag and pull down from the screen top to show it.)



6. Click  to launch setting.



6-1. Setting according to users' needs.



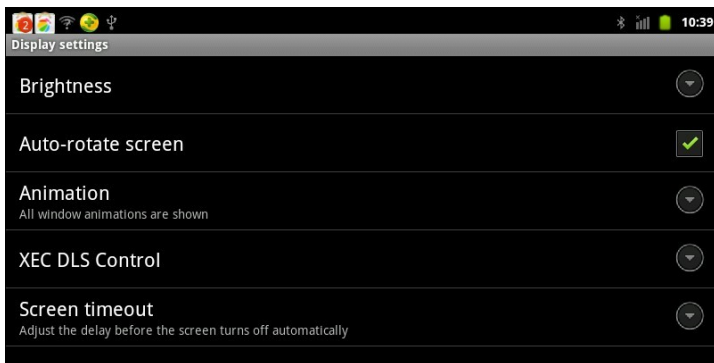
6-1-1. Click “Wireless & network settings” to launch setting of wireless and network.



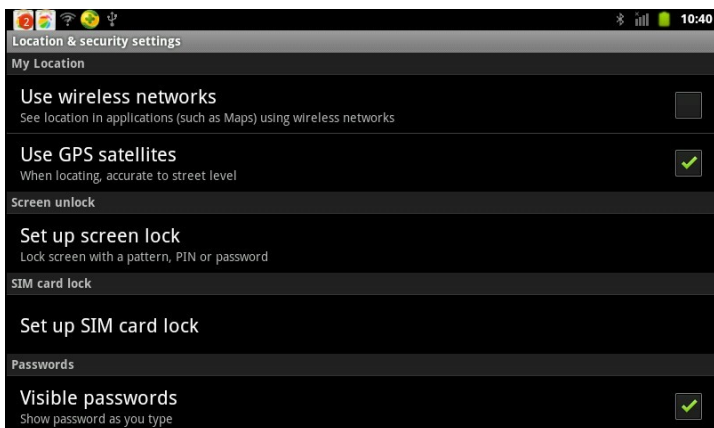
6-1-2. Launch “Call settings” after 3G SIM card inserted.



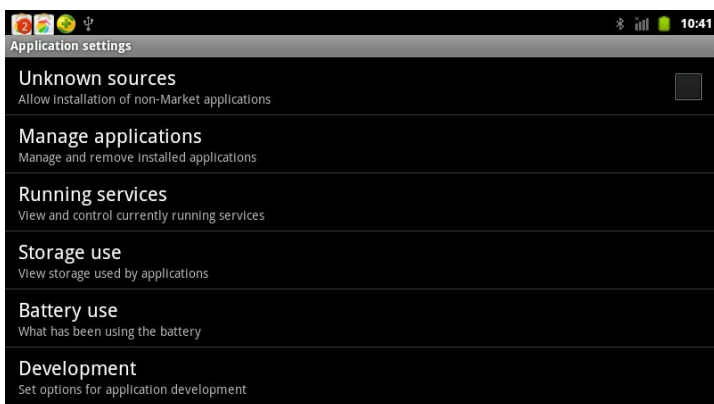
6-1-3. Click “Sound settings” after 3G card connected, to set sound function.



6-1-4. Click “Display settings” to set Brightness, Auto rotate screen, Animation, XEC DLS Control and Screen timeout.

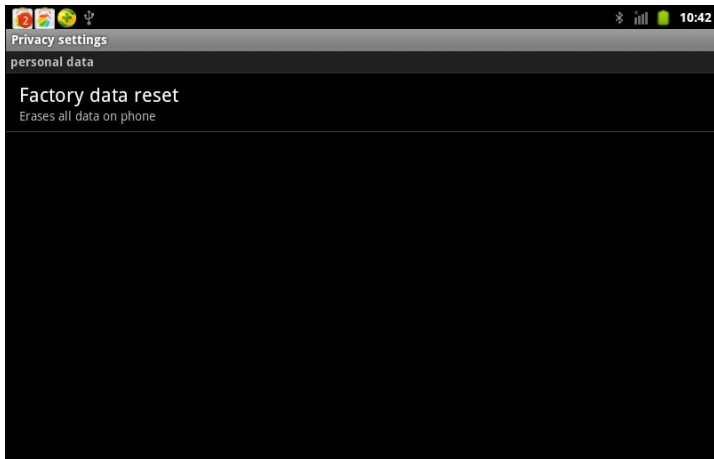


6-1-5. Click “Location & security settings” to set location and password management.



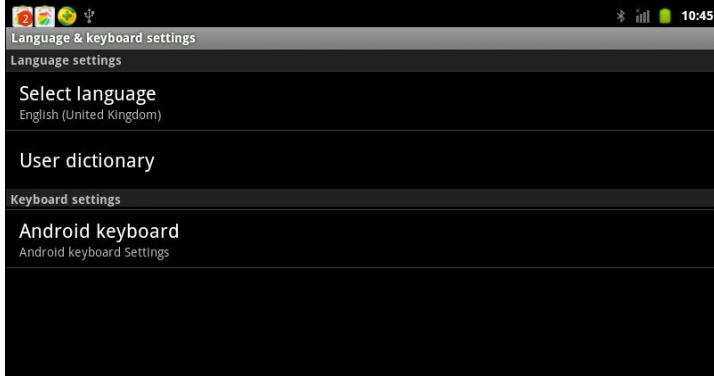
6-1-6. Click “Application settings” to launch background and auto sync setting when network connected.





6-1-7. Click “Privacy Settings” to restore factory settings when problem occurred.

Please DO backup all important files and data before restore factory settings. Otherwise, files and data will be deleted and restored to defaults.



6-1-8. Click “Language & keyboard Settings” to set language and keyboard functions.



6-1-9. Click “Date & time settings” to set date and time automatically and manually.

# Accessories

## Standard:



- |                   |        |
|-------------------|--------|
| 1. Extended cable | 1piece |
| 2. DC 12V adapter | 1piece |
| 3. Mini USB cable | 1piece |
| 4. CD drive       | 1piece |
| 5. Touch pen      | 1piece |
| 6. Manual         | 1copy  |

## Optional:



- |                          |   |
|--------------------------|---|
| 1. GPS antenna           | 1piece (connect with COM2 port on the extended cable) |
| 2. VESA rail slot        | 1piece  |
| 3. VESA bracket          | 1piece  |
| 4. 5000mA Li-ion battery | 1piece (built-in)                                     |
| 5. Micro SD (TF) card    | 1piece  |

# Trouble Shooting

## Power Problem

### Cannot boot up

- 1、 Wrong cable connection
  - a) Connect Extended cable with device first, and connect the AC end of DC adapter with DC input port of Extended cable, then the other end of DC adapter connect with power plug socket.
- 2、 Bad connection
  - a) Check every connection and socket of power source

## Screen Problem

- 1、 No picture on screen.
- 2、 The application reaction time is too long and cannot be activated when clicked.
- 3、 The image appears delay or still when switching.

**Please restart your system if the device has any problem as described above.**

- 4、 Display screen is misty
  - a) Please check whether the display screen surface has dust filth or not. Please simply wipe with clean and soft cloth.

**Note: due to constant effort to improve products and product features, specifications may change without notice.**

