



## **MK902II** User Manual



Quad Core Android PC

**Shenzhen Rikomagic Tech Corp.,Ltd**

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### Declaration

- The user manual includes all the information of safe and correct operation instruction. To avoid accident and product damaged, please make sure go through all the content carefully before using the product.
- Please keep the product away from high temperature, humid and dusty environment.
- Do not drop or crash the product.
- Do not cut off the device when it is formatting, or upgrading, otherwise it will cause operation system error.
- Do not dismantle the device. Do not clean it by alcohol, thinner and Benzene.
- We keep the right to upgrade and modify the product.
- Disclaimer: we only take the responsibility to provide the warranty and after service. The users have to take care of their data in the device by themselves. We do not responsible for any data or related lost.
- The product is not waterproof.
- All the pictures in the instruction are just for reference.

## 1. MK902 hardware introduce

### 1.1 Connector



- |                            |                       |                   |
|----------------------------|-----------------------|-------------------|
| 1. AV output;              | 2. HDMI output        | 3. Optical output |
| 4. RJ45 Ethernet connector | 5. DC in              | 6. USB Host       |
| 7. USB Slave               | 8. Micro SD card slot |                   |

### 1.2 Device connection Instruction

- Take out the device insert into your TV HDMI port through HDMI cable, make sure TV setting is HDMI input mode.(Refer to TV set user manual).
- Charge MK902II by power adapter.
- Suggest using 2.4G wireless keyboard or mouse. Plug 2.4G receiver on USB Host connector, if only mouse plugged, the device will provide soft keyboard during operation; If the device detected the physical keyboard, the soft keyboard will be hidden automatically.
- Mouse left button for “ok”, right button for “return”, rolling for page up and page down, Keep holding left button to drag icon or copy/paste file.

## 2. Remote control definition



Power button: once press to sleep or awake; long press to power off or power on.



Mute: during playing press this button to turn off or turn on audio output.



Home: press this key to return main menu screen.



Menu: During playing or browsing webpage, press this button to pop up hidden menu.



Up/down/left/right button: During menu setting or file browse, press these arrow keys to select corresponding files; During playback, up/down arrows can be used as volume up, volume down.



OK: press "ok" to confirm.



Return: press this button to return previous menu.



Volume up/down: Press these buttons to control volume up and down.



Previous, next: During playback, press these buttons to switch previous or next.



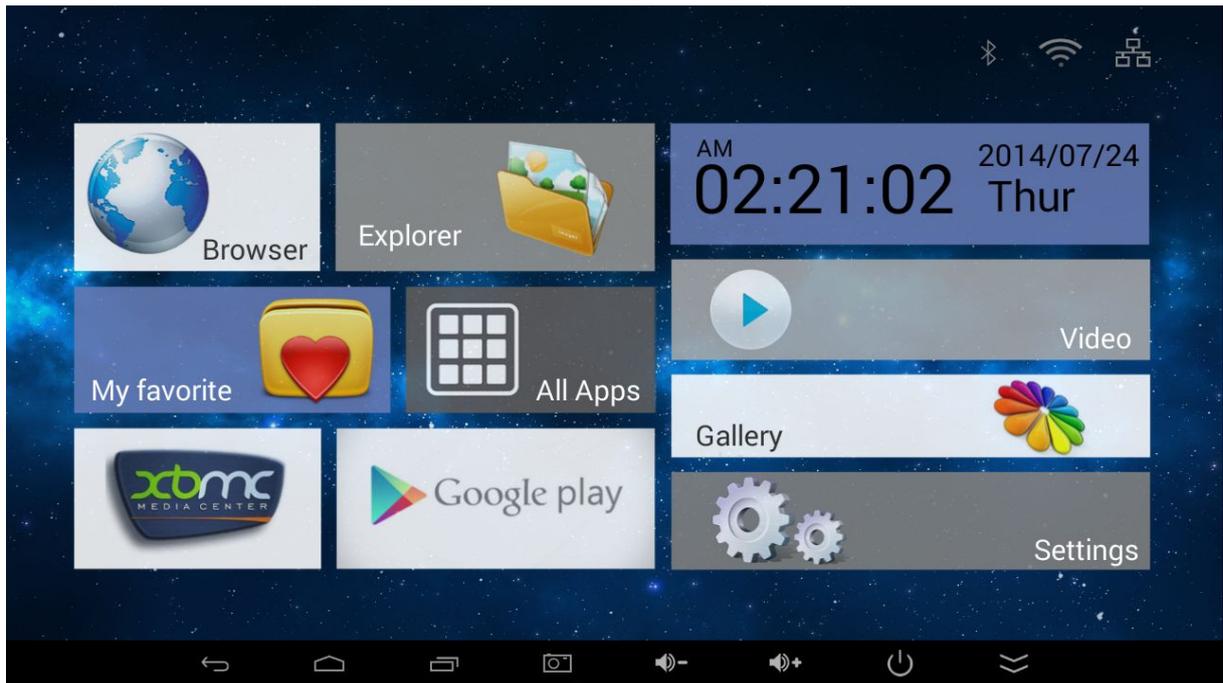
Pause, play: During playback, press this button to pause or resume.

### 3. Boot state

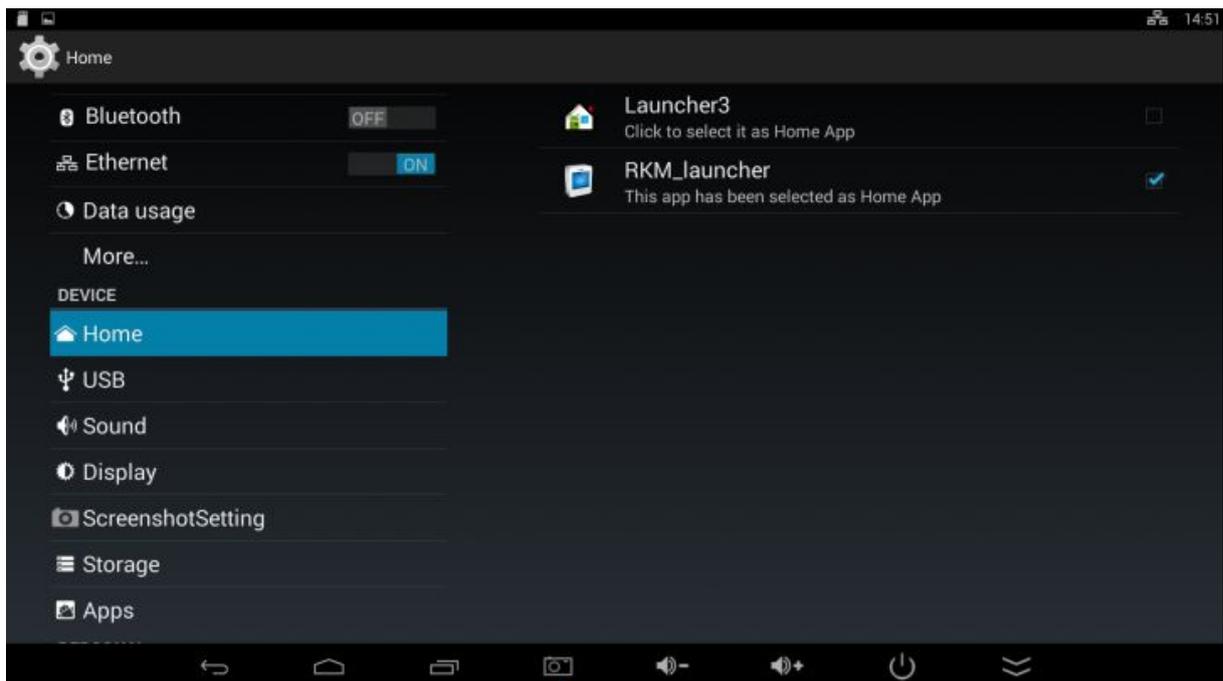
After powered around 10 seconds, the boot image will appear first then access to boot animation.



After around 30 seconds, device would access to main screen.



If user want to take pure android launcher, then access Setting → Home → select Launcher3, press  to go to desktop.



## 4. Main Screen Introduction

### 4.1 Function column





Return button: click to return to previous directory;



Homepage button: click it anytime to return to main menu;



Program button: Click to check all the running program;



Screenshot icon, press this icon to take screenshot.



Volume decrease button: Click to decrease volume;



Volume increase button: Click to increase volume;



Soft turn off button.



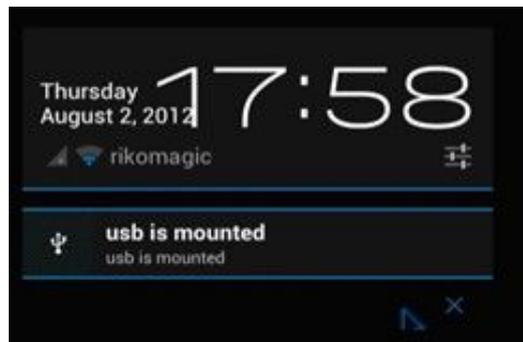
Hide icon: click for hide this function bar.

## 4.2 Status bar

Located on the right bottom, display T-Flash Card, USB connection, Time, WiFi and Download status.



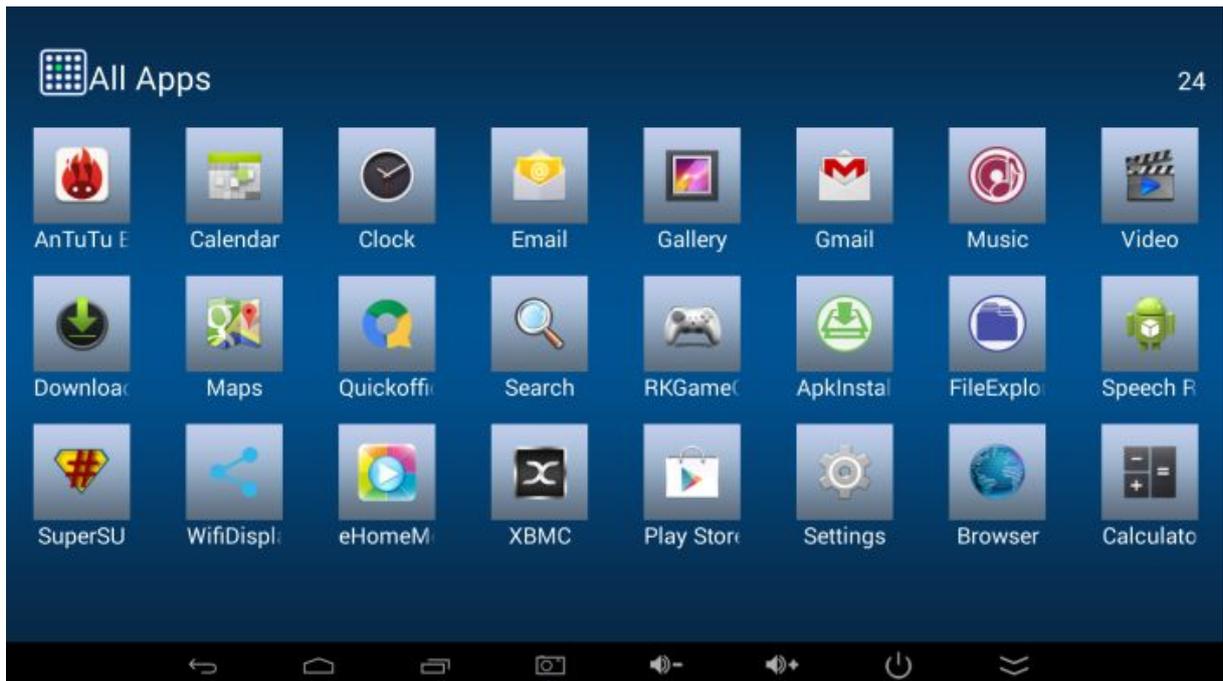
Click status bar, the hide menu will pop up:



## 4.3 Application



Click  to pop up all the installed APP and setup tools icon.



1. If the preloaded APP is beyond the first page, drag the page towards right or rolling the mouse roller to the second page to find other Apps;
2. If you want, you can long-press the APP and drag onto the desktop.

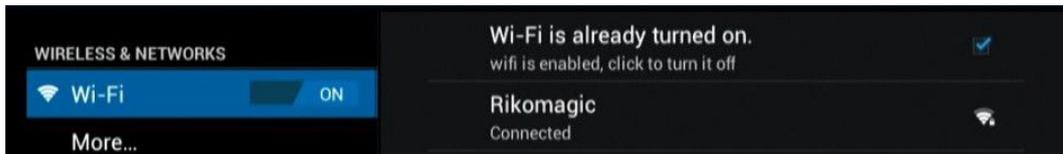
## 5. Settings

In the system user can setup according to their own requirements, such as network connection, language, input methods, Video output resolution, Sound output and check storage space.

Access to setting to pop up below screen.



## 5.1 WIFI Setting



Once turn on WiFi, the MK902II will auto search available wireless router within 20 meters, user just choose a router and input correct password to connected network.

## 5.2 Ethernet Setting

If there is no WIFI in the house, suggest to connect a USB LAN adapter (please select right matched USB LAN adapter) to setting Ethernet.

Setting method: Click “setting” → “More” → “Ethernet” → tick “Use Ethernet”, then the Ethernet setting finished.

## 5.3 Portable host pot

If connected the device with Ethernet (not WiFi ), then open portable host pot function, you could regard MK902II as an wireless AP.

## 5.4 Bluetooth

Open Bluetooth settings--> Scan and search equipment>select a device, input Bluetooth wireless password (if required)-->confirm. Then complete the Bluetooth pairing.

### Notice:

Some equipment, for example, Bluetooth headset maybe have a fixed password (like 000), then you must input corresponding password.

## 5.5 PPPOE Setting

If the network need dial-up, then click PPPOE Settings and input account and password.

Click “Setting → “More” → “PPPOE Settings” → input account and password.

## 5.6 USB

For exchange data between the MK902II and PC.

Operation steps :

Equipment connection: Connect with computer through USB cable, please note you MUST plug into USB Slave port of the MK902II, which is for computer connecting.

## 5.7 Sound

This is for Sound settings;

**Volume:** Control volume level;

**Operate prompt tone:** Setting prompt tone during operating;

**Screen saver sound:** Setting screen saver sound.

## 5.8 Display

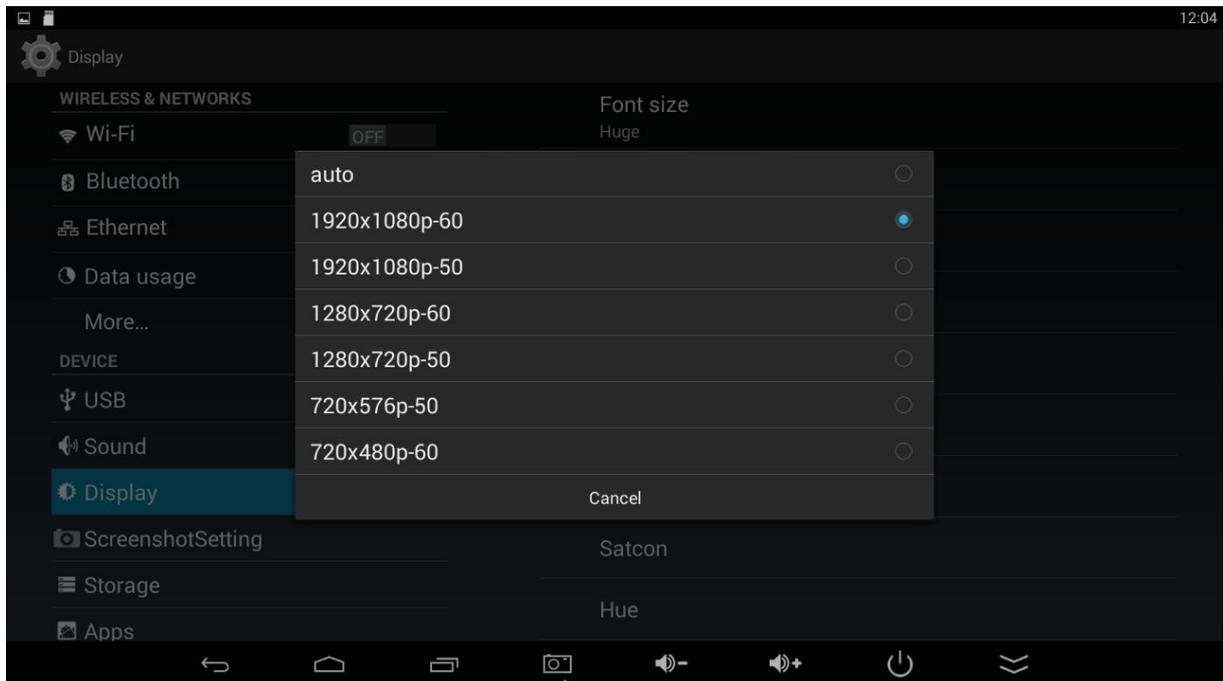
**Font size:** Setting font size according to your favorite.

## 5.9 Screen

This is for Screen settings:

1. Screen ratio: Used for adjusting screen ratio.
2. Output Interface: Default HDMI
3. HDMI mode: User can setting corresponding output resolution according to the TV.

Normally system will auto detective.



## 5.10 Storage

In this option, user could view local storage space and external storage space, besides, user even can uninstall or format storage equipment.

**Notice:** System divided the whole storage into seven partitions, only two partitions visible, the other five partition has been occupied by Android system.

The balance space is equal to the sum of two partitions.

### 5.11 Apps

In this option, user could view installed and running Apps, at same time could check DDR parameters.

### 5.12 Security

User can set password according to their request.

### 5.13 Language & input

1. Setting menu language here, there are more than 60 languages build in already.
2. Setting IME(Input Method Editor),There are only Chinese and English IME build in, if need other language IME, pls search corresponding IME from APP store and install by yourself.
3. Setting keyboard, mouse cursor speed & simulated mouse step length here.

### 5.14 Backup & reset

**Backup:** Avoid lost some important APPs during reset or update/recovery system, t's better chose this function for backup.

**Reset:** Reset to factory settings.(Pls backup data first before reset)

### 5.15 Date & time

Since there is no battery inside, date and time set by manual can't be saved, Suggest setting to network synchronization time, as long as the network connected, the date and time will be with the network synchronization.

### 5.16 Developer options

**USB debugging:** During connecting with PC to exchange data, please open this option;

### 5.17 About device

User can check system info here.

## 6. Browse /Copy Files

### 6.1. Open file Explorer on the desktop.



Internal Flash: Check internal storage space

SD Card: If TF card inside, icon will be highlight

USB: If USB device (HDD, U-disk) connected, the icon will be highlight.

Network Places: Through this option, user can access to other PC to find files and playback.

## 6.2. File Copy

Long-press a file or folder to pop-up a menu, including: Copy, Delete, Move, Paste, Rename options, if no need execute operation, just click “cancel”.

## 7. Install/Uninstall Apps

MK902II supports many commonly used third-party Apps. You can install or uninstall Apps freely; there are two methods available for installing Apps.

### 7.1 Online installation

Please login Google Play store or other Android marketing to download Apps (User should have Gmail account if download from Google play store); after download system will remind you to install the Apps, just click install according to the system prompt.

### 7.2 Local installation

User also can copy Apps from computer to USB Flash or TF card, insert the USB Flash or TF card to your device, just click the APK icon to install according to the system prompt.

### 7.3 Uninstall Apps

Click Settings→Apps, click an Apps you want to uninstall, the uninstall window will pop up click uninstall to uninstall. If you don't want to uninstall just exit.

### 8. DLNA

**DLNA** : Through some special APP(such as iMediaShare Lite.), all the multimedia files can be pushed from smart phone or Android tablet PC to big screen, user can share those pictures/music/videos with family or friends freely.

### 9. Web Browsing

After connected network, user can access the webpage screen through the system browser. New opened webpage will be shown on the screen as tag, click “+” to add new webpage, click “x” to close the webpage.

### 10. Local audio & video playback

Through the file manager, user can browse & playback those contents of TF card, USB flash or USB HDD.

### 11. Use virtual keyboard

If just connect USB mouse only, then the virtual keyboard will pop up;



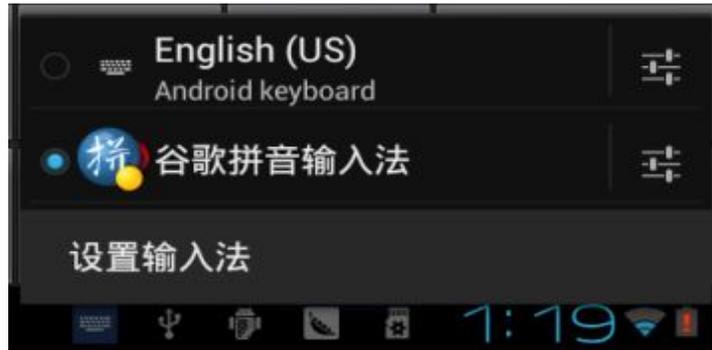
If connect with physical keyboard, system will hidden the virtual keyboard.

### 12. Switch input methods

Click the keyboard icon at the bottom status bar from desktop;



From below screen, select corresponding favorite IME(Input method editor)



## 13. System recovery/update

If your MK902II has following issues, please solve these issues by recovery/update methods.

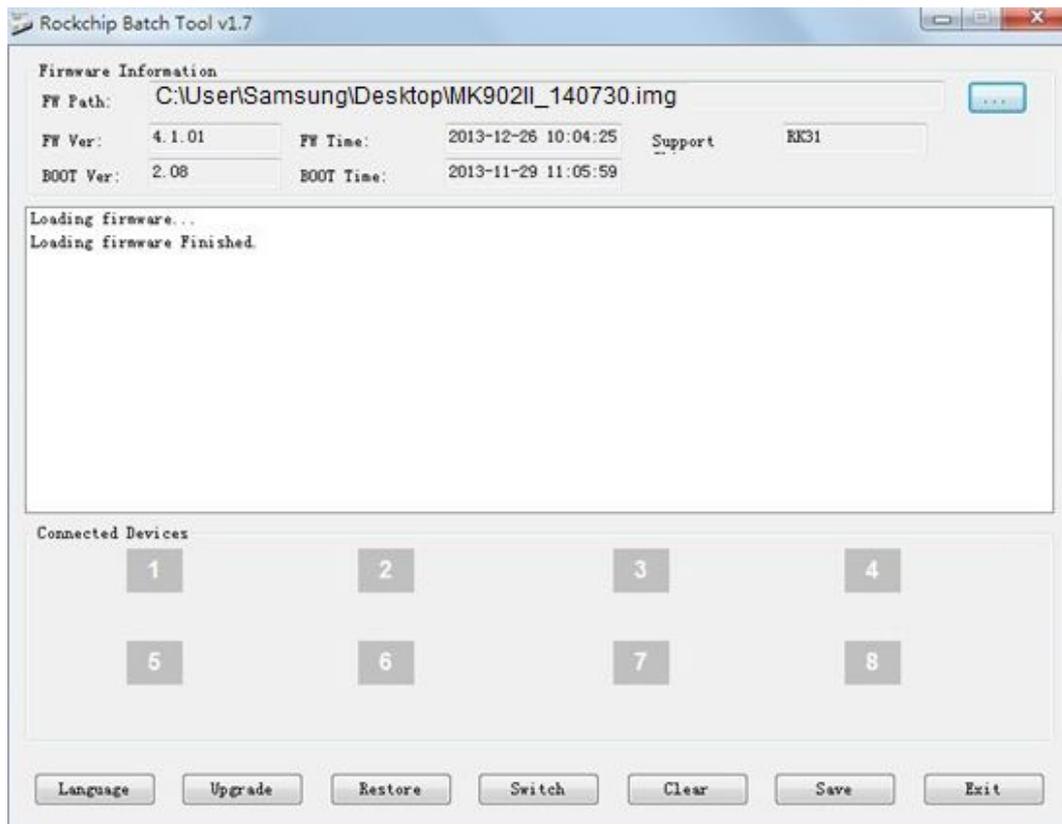
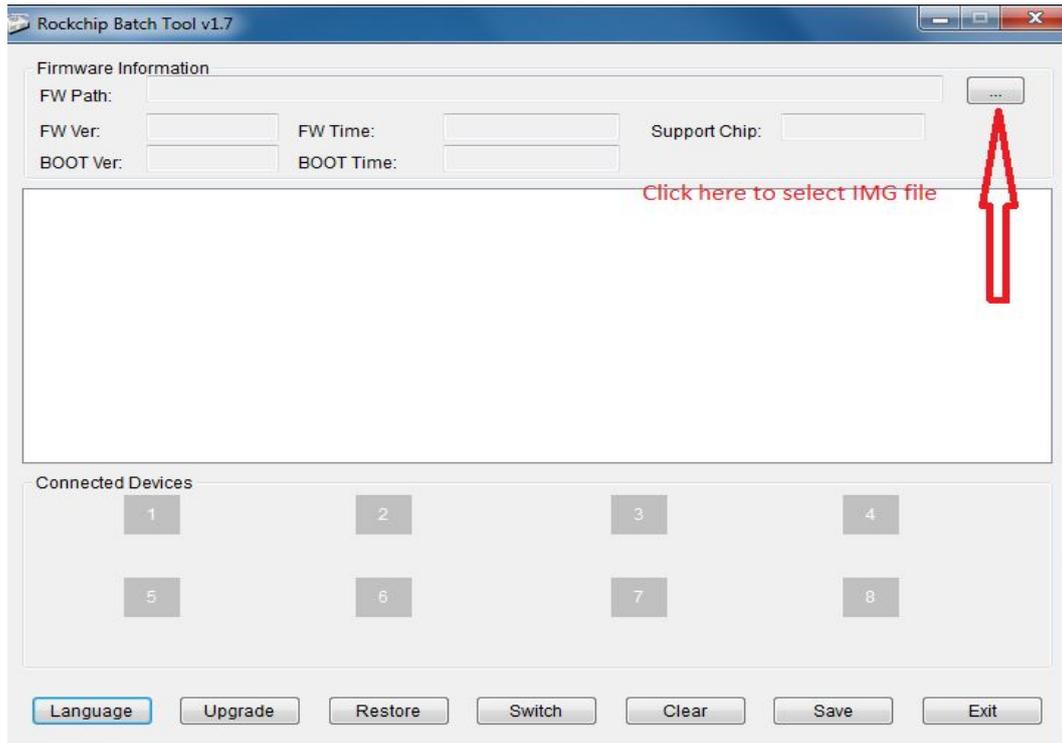
1. If you need update to the latest firmware,
2. After boot, there is no signal;
3. There is only boot screen;
4. System running very slow, crashing;
5. Can't find the wireless network equipment, or can't connect wireless;
6. When installation Apps, player loss power unexpected and cant boot up.
7. TF card update failed and can't boot again etc.

### 13.1 Recovery/update on Windows XP system

#### 13.1.1 Download recovery tool Batch Tool, driver and recovery firmware,(img file) from official website.

Download, decompression the folder and find "RKBatch Tool" to double click, below screen will pop out, then add img file.

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### 13.1.2 Connect MK902II with computer.

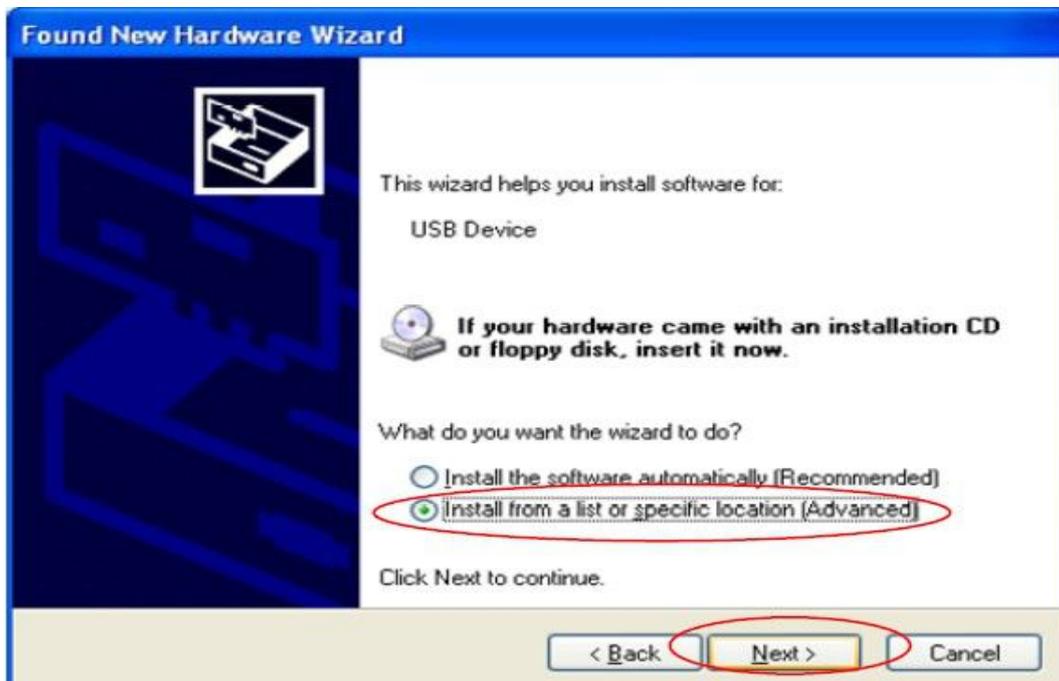
1. Prepare USB cable and plug into PC USB port first(don't connect with USB slave now)
2. Prepare a thin metal stick, press the recover button by the stick according below method.



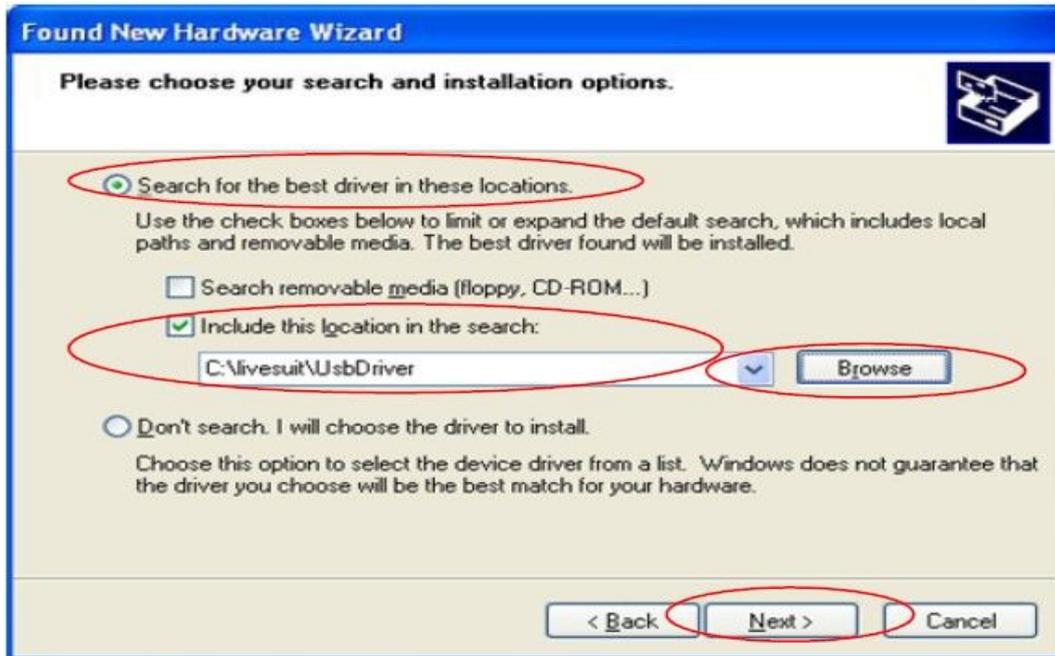
3. Don't loose the stick, at same time, plug the USB cable to USB slave port of the MK902II, after 3-5s, loose the stick.

### 13.1.3 USB driver installation.

There will pop up a guide window to install new driver.



Select "next"



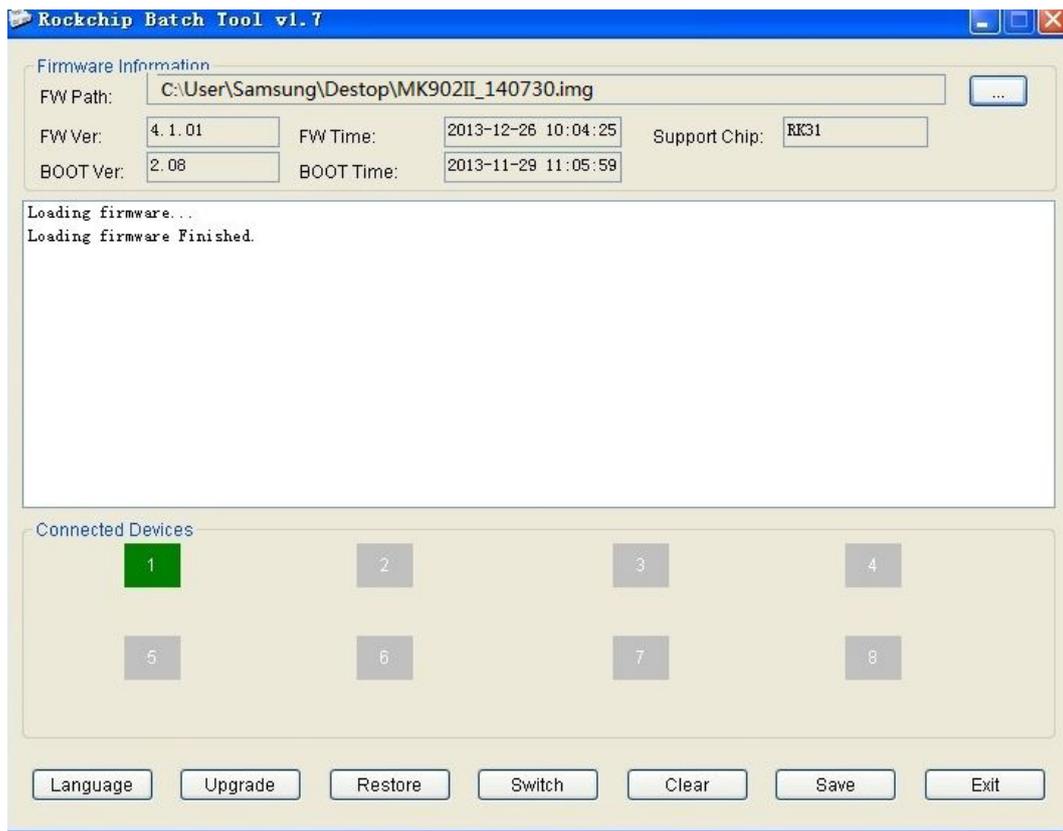
Choose the options as picture display, click “Browse”, find out “USB Driver”, click “Next” to install. If installation finished, computer will pop up below window, click “Finish” to finish.



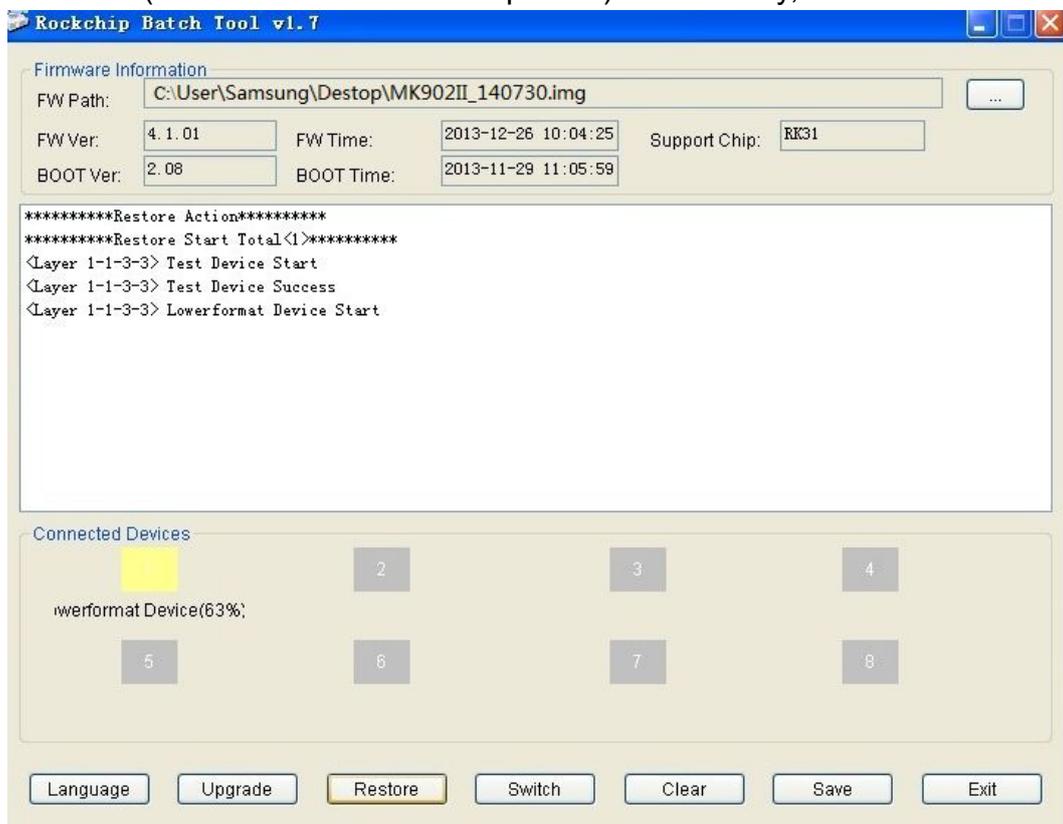
#### 13.1.4 How to recovery/update by RKBatch Tool

After installation, the “connect device” icon on the “batch tool” will changed to green, as below:

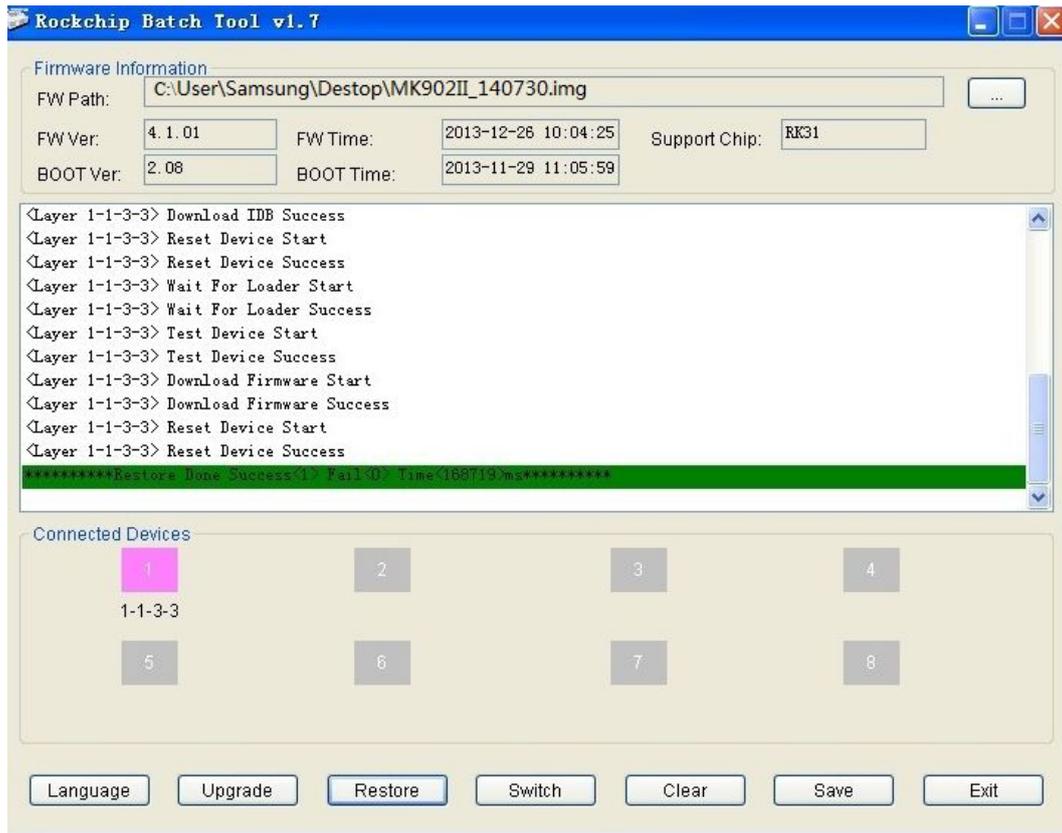
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Then Click “restore” (the third button of below picture) for recovery, as below.



This procedure will take around 3minutes, please wait patiently, during recovery/upgrade, don't remove the USB cable.Till below screen appeared, means recovery is successful.



## 13.2 Recovery/update on Windows WIN7 system

### 13.2.1 Download FW and RKBatch Tool

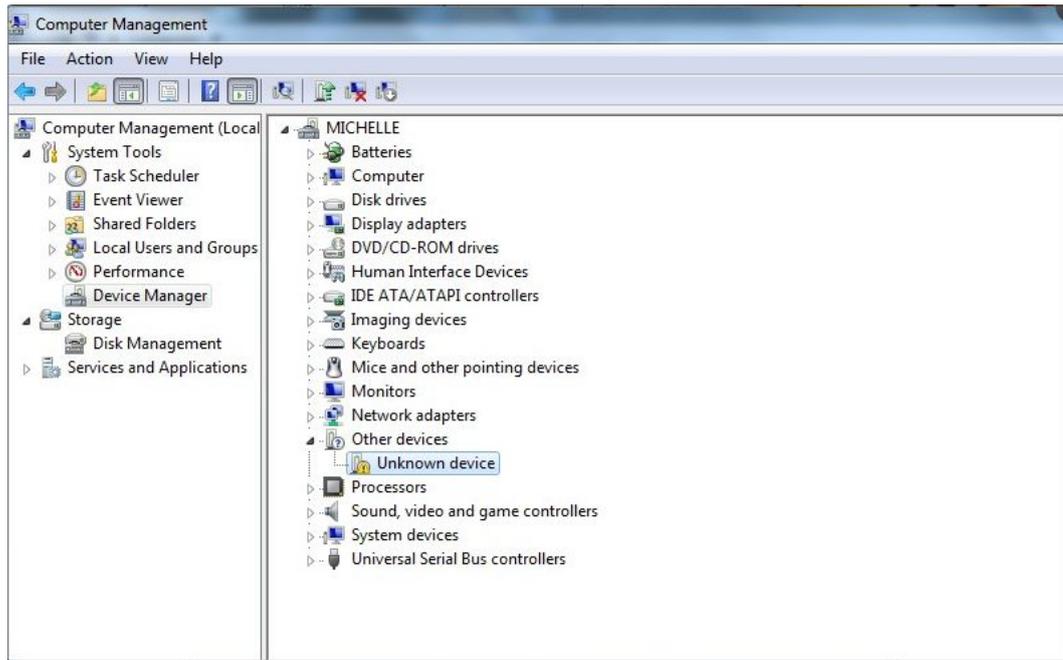
Pls refer to 13.1.1.

### 13.2.2 Connect MK902 II with computer through USB slave.

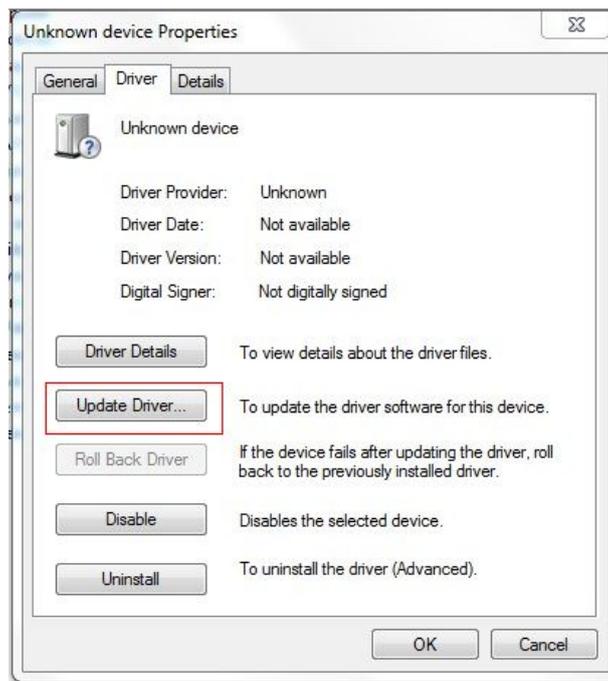
Pls refer to 13.1.2

### 13.2.3 Install the USB driver.

Press “computer” with right key, computer---management--device management--other device, pls check below picture.



Double click unknown device.



Press update driver, Click browse for driver software on your computer. And choose the correct driver.

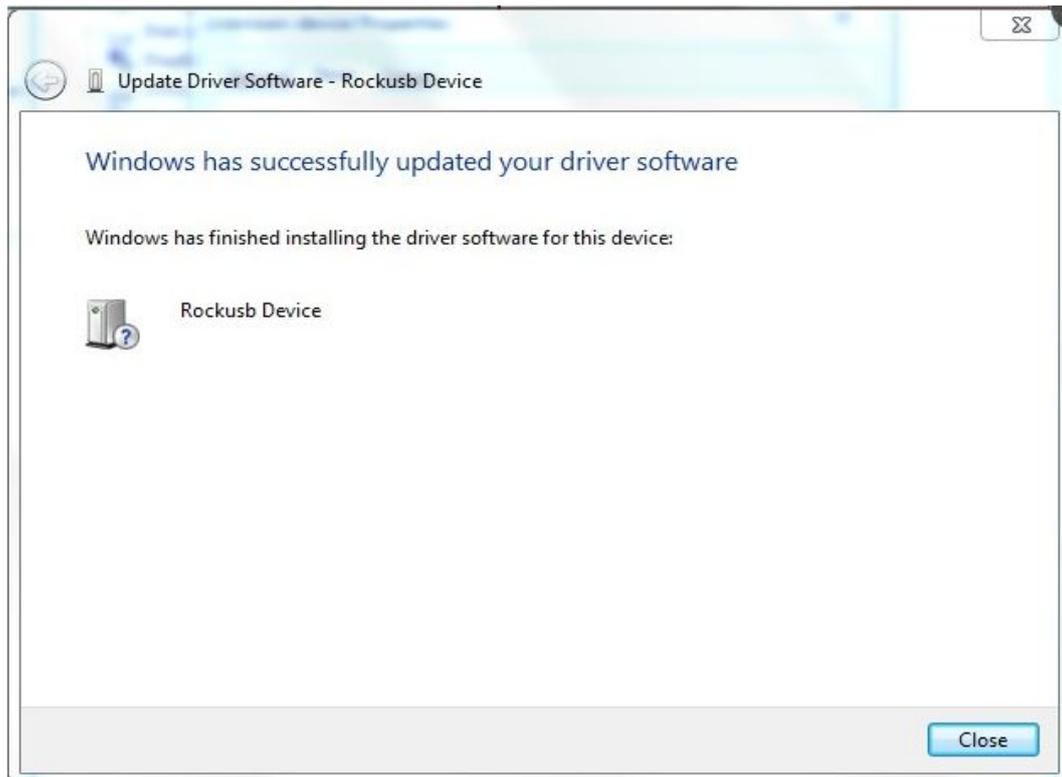
If your computer is WIN7 32bit, choose x86--win7; if it is WIN7 64bit, choose x64—win7.



Press next, will pop up below window, Click on the image below red circle option. Click install.



Till below screen appear, means driver installed successfully.



## 13.2.4 How to upgrade or restore by RKBatch Tool.

Pls refer to 13.1.4.

Shenzhen Rikomagic Tech Corp.,Ltd

Add: 7F Bao'de Industrial Center, Lixin South RD,Fuyong Street,

Bao'an,Shenzhen,China,518103

Official website: [www.rikomagic.com](http://www.rikomagic.com)

Tel: 86-755-29981801; Fax: 86-755-27317052

After service: [service@rikomagic.com](mailto:service@rikomagic.com)