Android Network Digital Signage

User Manual (7.1 version)

Operating Instructions for Digital Signage

1. Product Features

◆Platform and configuration:

Hardware platform, ARM Cortex-A17 1.8GHz Quad core processor, use chip of Mali-T76x series GPU;Software platform, based on Android 7.1 operating system, memory/DDR3 2GB, inter FLASH/8GB NAND;

◆Support 4K Ultra Full HD videos and pictures; Built-in HDMI1.4, 1080p output and 3D output;

◆Support Full HD video format:

Video: RMVB, FLV, MPEG1/2/4, AVI, DIVX, XDIV, WMV9, H.264, VC-1, MOV, MKV, MP4, TS, M2T, VOB.

Audio: MP3, WMA, WAV, EAAC+, MP2, dec, Vorbis (Ogg) , AC3, FLAC (Lossless audio), APE (Lossless audio),BSAC;

Pictures: BMP/PNG/GIF/JPEG(4088*4088);

◆Support webpage/Flash playback, can achieve strong touch interactive platform rely on the touch interactive of

Webpage/Flash;

◆Strong input function:

1) Support multi touch, resistive touch, capacitive touch, IR touch, with touch screen calibration function;

2) Support remote control;

3) Support USB mouse/keyboard;

◆Strong output function: Support landscape and portrait mode once power on;

◆Multi storage media: Support U stick and SD card (can extend TF card);

◆Multi languages: Chinese, English etc many countries' languages,Support TTF vector font, distortionless display;

◆Clock display: Built-in clock IC, it could update time information after networking, correct system time automatically.

◆Support Strong network : Support LAN, WIFI and 3G (extend Bluetooth);

◆Combined with CMS Software, it could make video, Television images, pictures, animation, text, documents,web pages, streaming media, database data into one wonderful section program, which also could be launched to terminals in different places through network, show the great graphics and real-time information to people at different appointed places.

Safety Warnings and Precautions

Thank you for purchasing the high-performance multi-functional Digital Signage from Displays2go. We have considered the factors to ensure personal safety in product design and have tested rigorously at the factory. However, improper installation and use may result in electric shock and fire.

In order to safely use, maximize performance of the unit and extend the life of the product, please read and follow all instructions carefully before using the product.

Keep the instructions for future reference.

We strongly recommend using a surge protector, or a power strip with internal circuit breaker to prevent damages to the digital signage.

Symbol Legends:

⚠ **Warning: May cause personal injury or death**

🚫 **The operation is prohibited**

⚠ **Caution: May cause damage or property loss**

● **The operation must be executed**

If any of the following occurs:

· Power outage or instable voltage.

· Abnormal sound or smell from the unit.

· AC power cord is damaged.

· Digital Signage is damaged due to drop, knock or impact.

· Any liquid or foreign matters fall into the enclosure.

Turn off the Digital Signage immediately, pull out the plug from the power outlet, and ask the authorized personnel for maintenance timely.

🚫 **If coal gas or other flammable gas leaks, do not pull out the plug of the LCD Digital Signage or other electrical appliances; instead, turn off the gas valve immediately, and open the doors and windows quickly.**

⚠ WARNING

🚫 ● Do not use power supply other than AC 110V, 60Hz.

● Cut off the power supply before connecting or disconnecting any cables.

● Do not place the Digital Signage at any instable positions, or else it may be damaged or cause fire.

● Do not place the Digital Signage in the positions such as:

1.The environment subject to direct strong sunlight, moisture, extreme temperature or too much dust;

2.The environment with flammable or explosive materials;

3.The environment with flammable or corrosive gases;

● Do not use damaged or inappropriate power outlets and ensure that the plugs and outlets contact properly.

● Do not let dust or metal deposits adhere to the plugs and outlets.

● Do not damage the power cords:

1.Do not modify the power cords;

2.Do not place heavy objects on the power cords;

3.Keep the power cords away from heat source;

4.Do not pull the cord to remove the plug.

● Do not connect too many plugs to one outlet in parallel, or else it may cause fire due to excessive power consumption.

● Do not approach the Digital Signage with open flame (e.g. a lighted candle), or else it may cause electric shock or fire.

● Do not put any sharp objects, metal or liquid into the vents or let them touch the signal terminals to avoid short circuit, product damage, and electric shock.

🚫 Do not touch the plugs with wet fingers, or else it will cause electric shock.

⚠ Do not use the Digital Signage in stormy weather, especially when there is lightning; instead, please disconnect the power and antenna plugs to avoid lightning strike.

🚫 Do not disassemble the Digital Signage without permission, or else it may cause electric shock or fire. Please ask qualified technician for repair.

Note:

Contact local dealer if you have questions about the operation, debugging and connection of the unit; if the unit doesn't work normally, please cut off the power immediately and consult the dealer. The unit is class-A product, which may cause radio interference in living environment. In this case, please take feasible measures, and use power plug as the disconnection device.

Remote Control
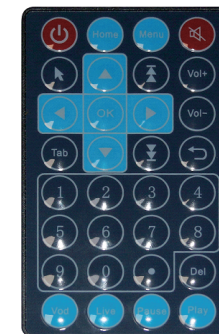
1. Power on/off button.

2. Press this button to return to home screen.

3. Press MENU to organize screens and apps.

4. Mute. Press this button to mute the sound.

5. Press this button to show curser. Press it again to turn it off.

6. Upwards Arrow. Move up selection or move the cursor up.

7. Downwards Arrow. Move down selection or move the cursor down.

8. Leftwards Arrow. Move selection to the left or move the cursor left.

9. Rightwards Arrow. Move selection to the right or move the cursor right.

10. Confirm button, select the use menu or setup menu, press this button to confirm

11. Turn volume up

12. Turn volume down.

13. Return to previous page or a level up in an app.

NOTE: Only buttons shown above have functions.

2. Operating interface
2.1 Main interface
After power on, the machine will enter into main interface, as shown below:

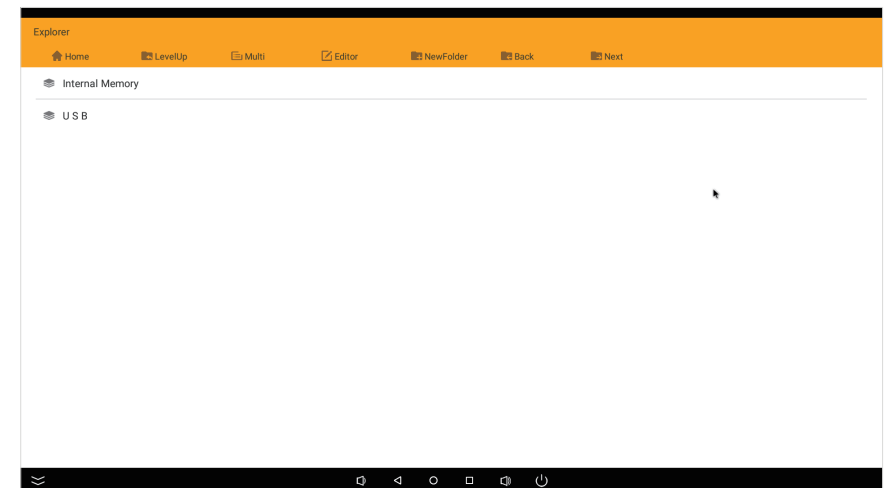|	Setting menu		Vol -
	File manager		Vol +
	Application management menu		Return to previous menu
	4k video player		Return to the main menu
	Browser		Show the picture that has been opened
	Power on/off and restart shortcut key		Quick hide

2.2 Application management interface

Click the button in the main interface, [::] enter into application management interface.
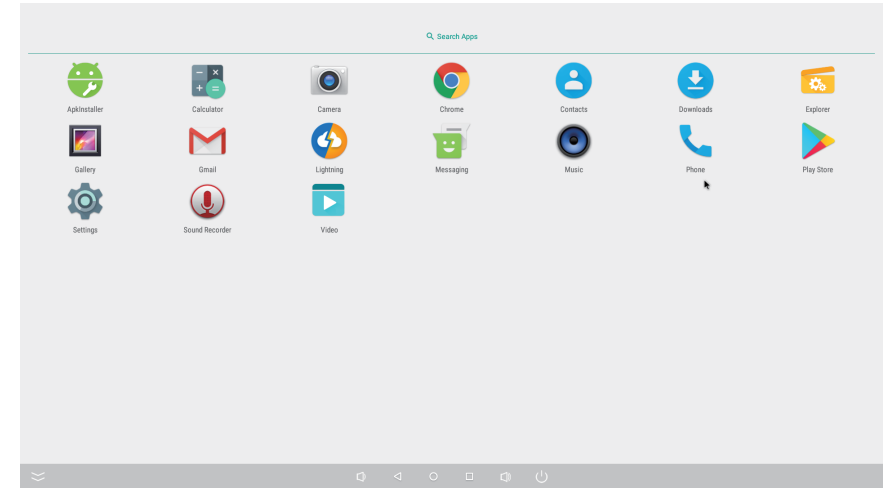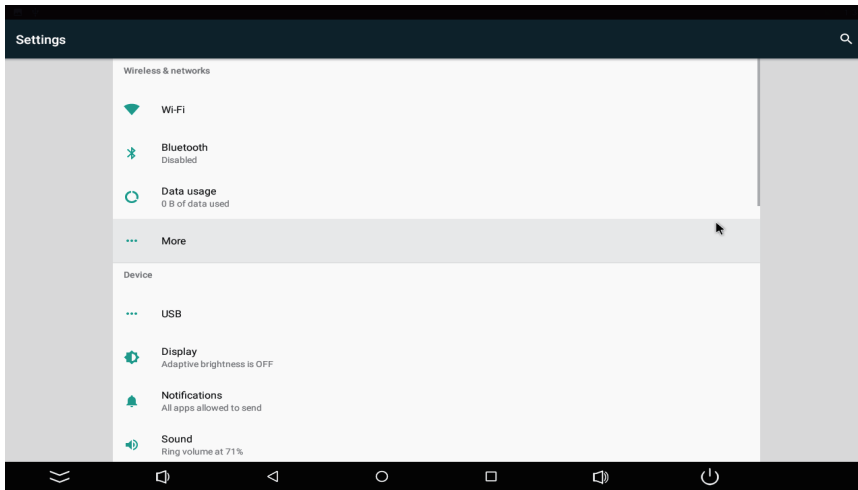

2.2.1 File Manager
Click [⚙] , then enter into file manager interface, there is local memory, SD card and U disk options, then enter into the corresponding storage to copy the file, multiple choice, editing a new folder etc.
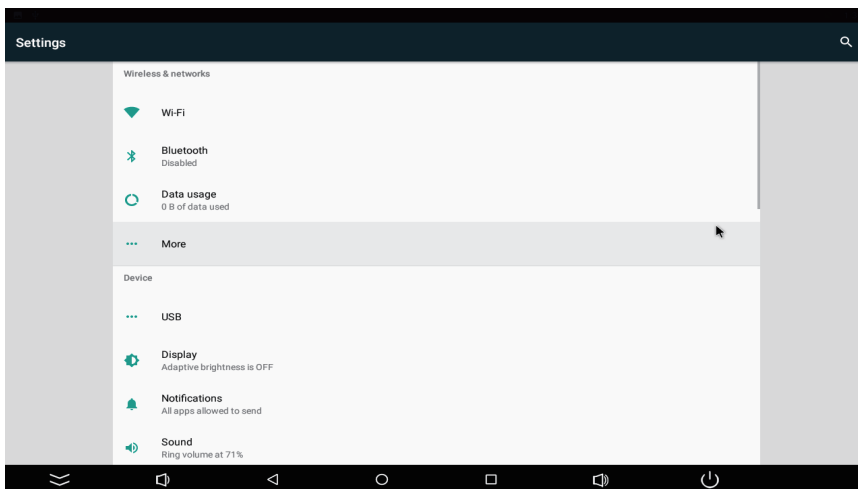
2.2.2 Setting menu
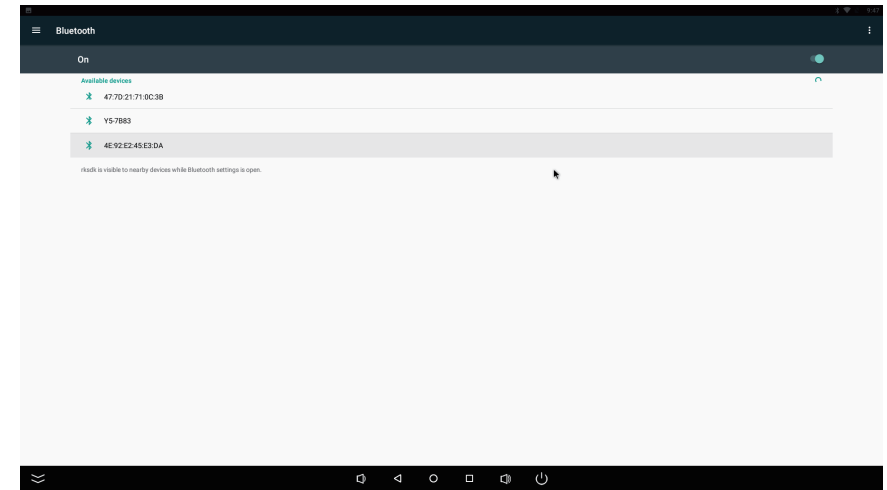
Click [⚙] , then enter into setting menu

2.2.2.1 Built-in WIFI

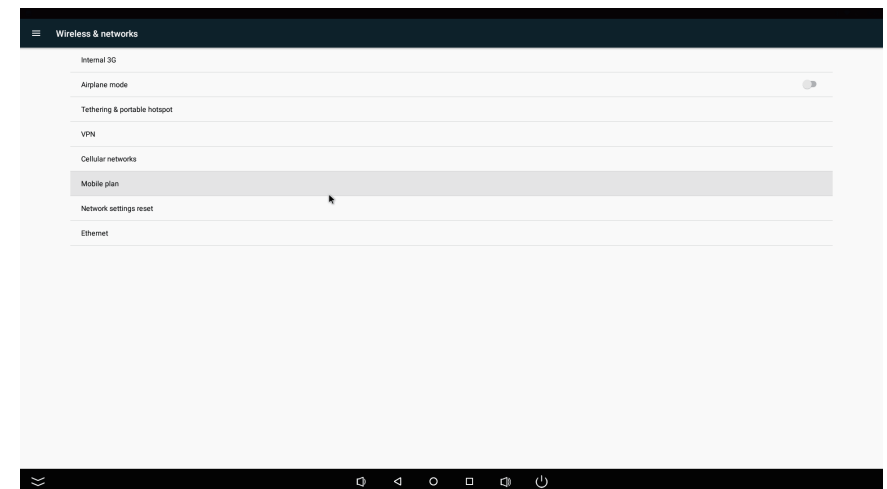Click [🛜 Wi-Fi] , enter into WIFI setting to connect WIFI.

2.2.2.2 Built-in Bluetooth

Click [∗ Bluetooth] , enter into Bluetooth setting, turn on/off Bluetooth, Bluetooth connection operations etc , **As shown below:**

2.2.2.3 Other network setting

Click [••• More] ,enter into network setting menu, turn on/off WIFI hotspot, LAN, Mobile network settings.

2.2.2.4 Display setting

Click [Display] , and adjustable: brightness, contrast, saturation, Display rotation angle, hidden status bar, wallpaper, font size, screen fit, screen trimming, display output mode.
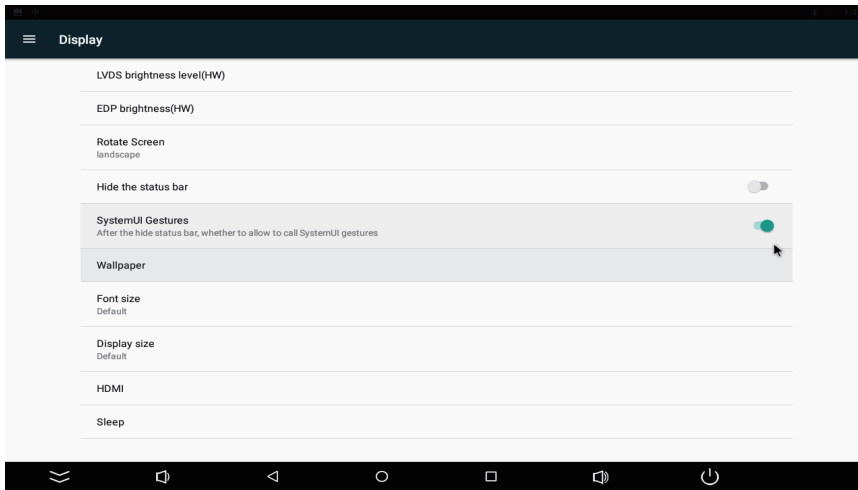
2.2.2.5 Voice setting

Click [Sound & notification] to enter into, adjust the multimedia volume, ring tones and so on
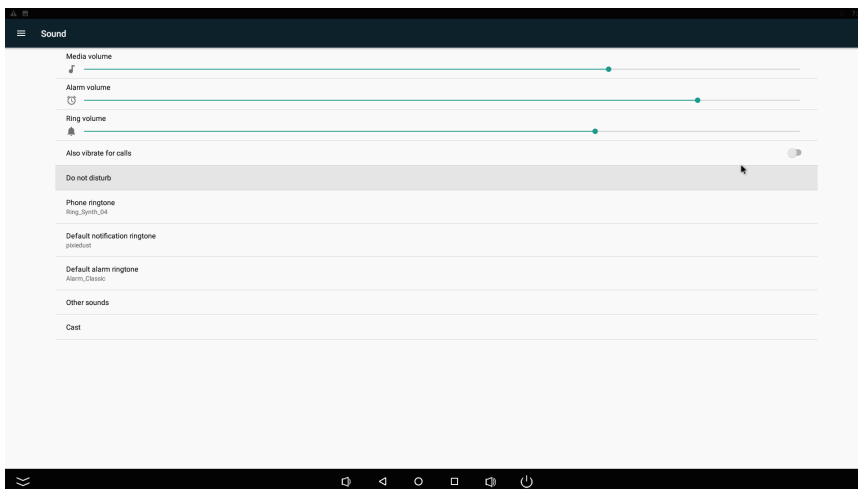
2.2.2.6 Storage

Click [Storage] to enter into to check the memory and storage space.
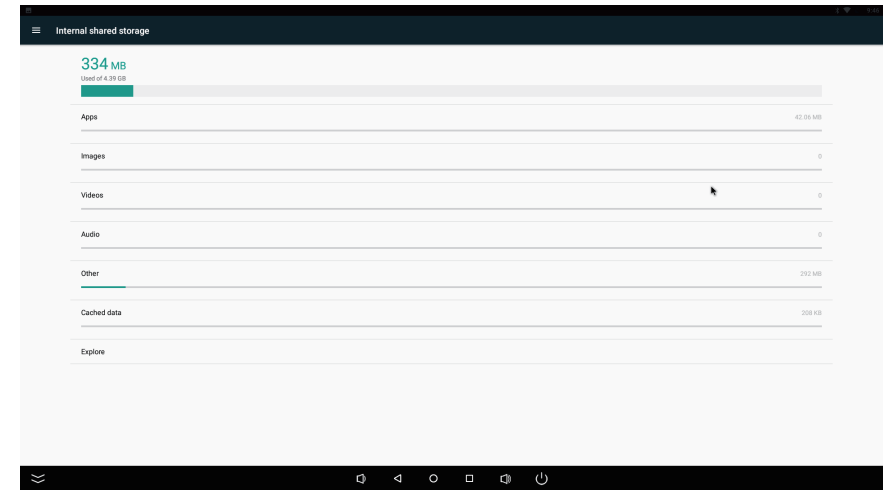
2.2.2.7 Application

Click [Apps] to enter into to manage and uninstall installed APP applications.

2.2.2.8   Display output mode

Click [HDMI] to enter into to set up HDMI output mode and so on .

2.2.2.9 Language and input

2.2.2.10 Factory Reset

2.2.2.11 Time setting

2.2.2.12 System Version Number

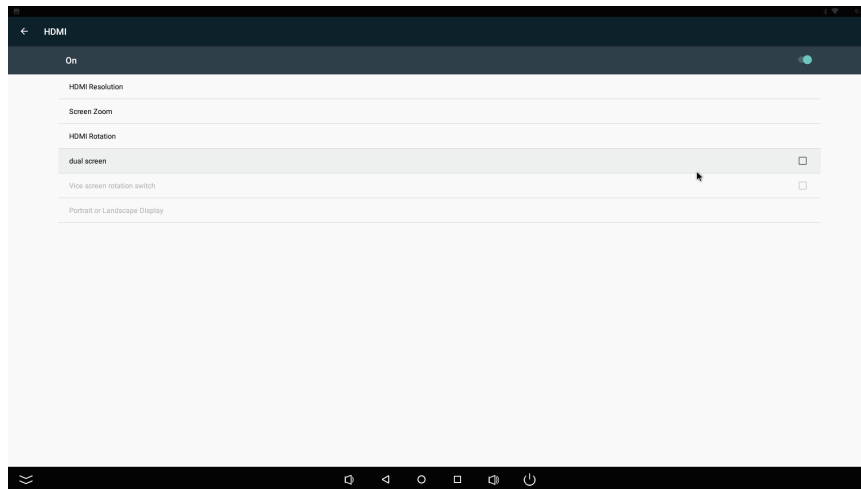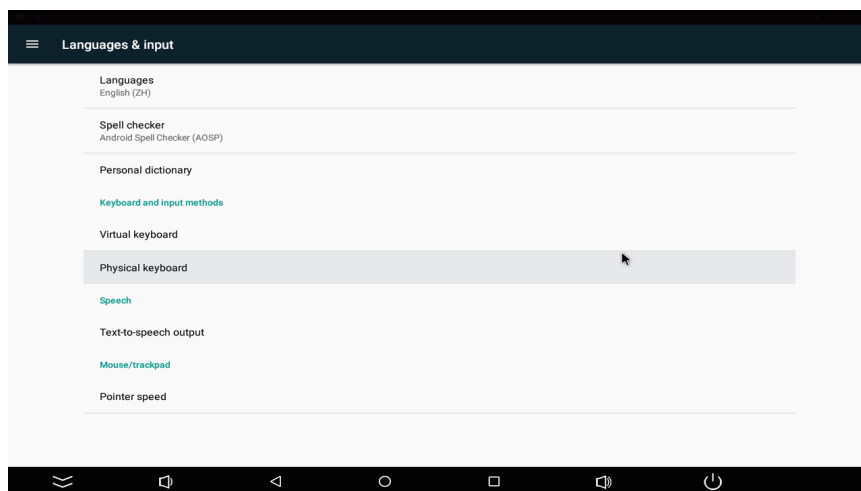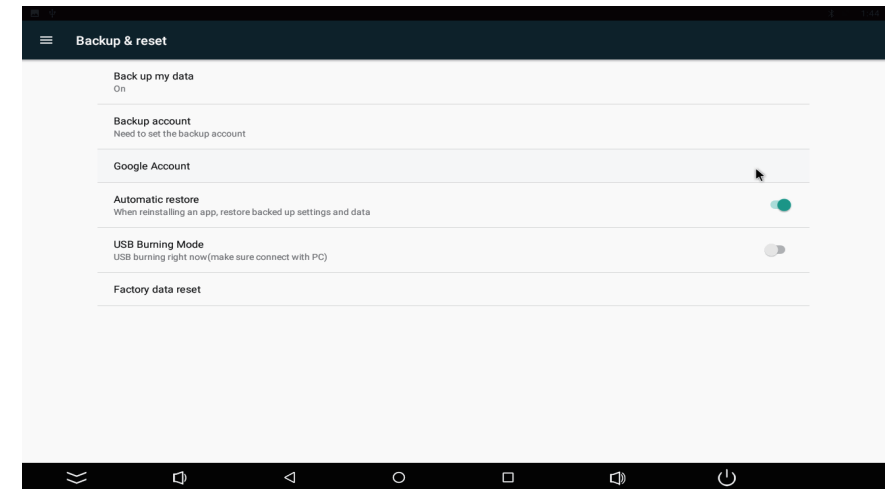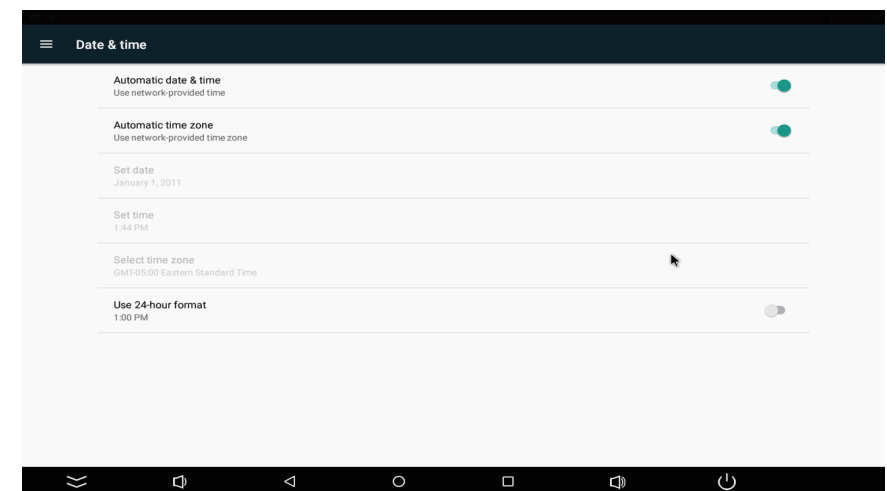|	
Settings	🔍
📇 Accounts	
G Google	
🌐 Languages & input English (ZH)	
☁ Backup & reset	
System	
⏰ Date & time GMT-05:00 Eastern Standard Time	
🧍 Accessibility	
{} Developer options	
ⓘ About device Android 7.1.2	
••• Other Settings	

☰ **Device status**	
FLASH Size 8GB	
MCU Firmware version 2018080200	
Face Detect not support	
Face Type null	
Model rk3288	
Android version 7.1.2	
Android security patch level April 5, 2017	
Baseband version EC25ECGAR06A04M1G	
Kernel version 4.4.143 wxl@server-250 #455	

☰ **Other Settings**	
Shutdown/reboot	
Return	
Timing switcher Off	
DPI set 160 dpi	
CameraAdjust	
Cut a full screen	
Gpio test	
Application startup No application	
COM assistant	
Grab exception information	⚪

Software update

Upgrade method 1

1: Update.zip Upgrade

1. First, copy the update file update.zip into USB flash disk and SD card, and then plug in the USB flash disk or SD card with the display on, it will pop up "Firmware Updating" around 5 seconds automatically.
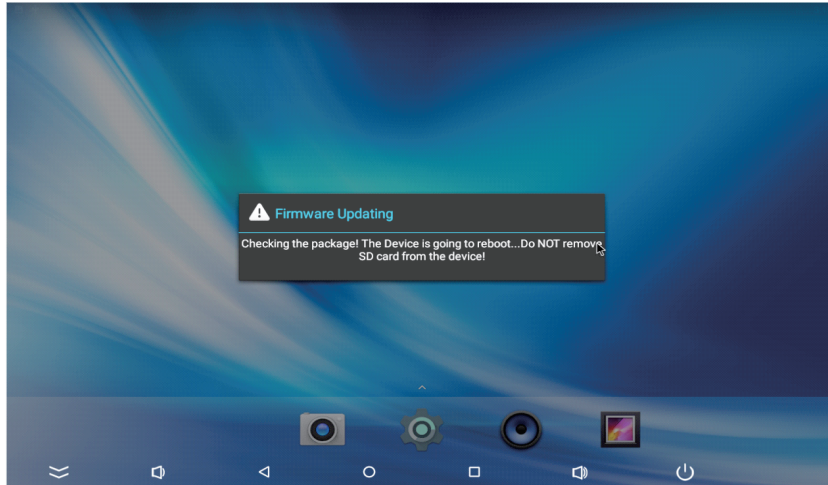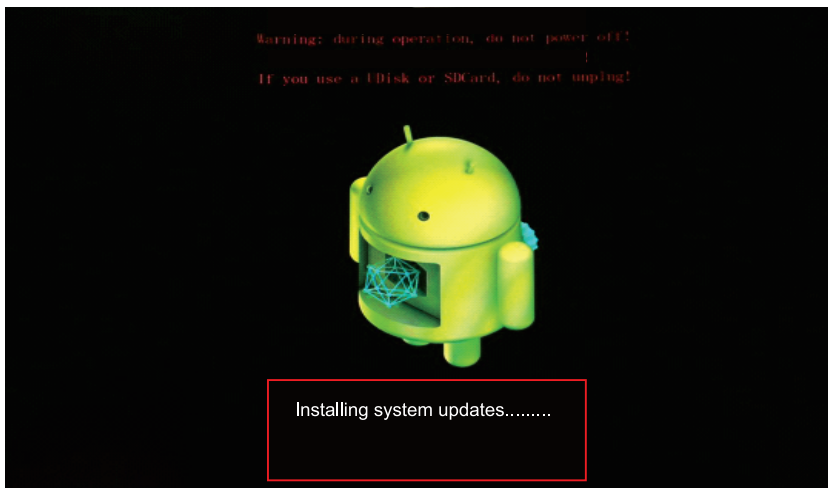Click "Install", wait around 2 seconds, it will pop up the dialog box as below photo:

2.After the pop-up, the display need to wait around 10 seconds, it will show black screen and reboot, it will upgrade automatically without any operation.

The board will automatically reboot after the upgrade of "Update"

Upgrade method 2

TPrepare a 2GB SD card to make the upgrade SD card. The steps are asfollows,
(1) Open the list where the RK3288 card tools are, running the"run_For_Ver2.19_Loader.bathe upgrade SD card making process
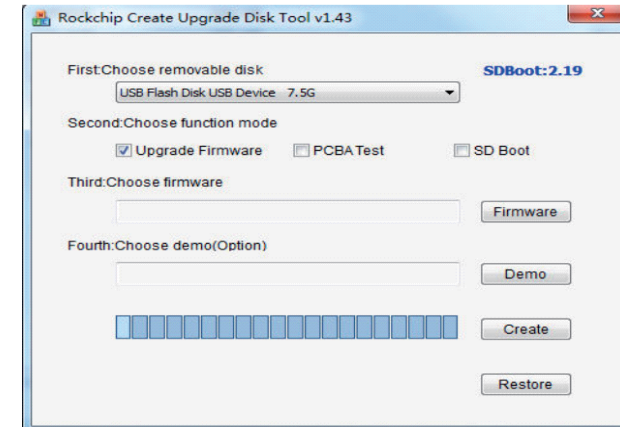
（2) Insert the SD card, option the "Upgrade Firmware" at the 2nd step, then click the"Firmware", choose the hardware that need to be make"rk3288_update_v51_wifiap6181-6212_222a-004d_audiohalf_20180106", as belowpicture shows.
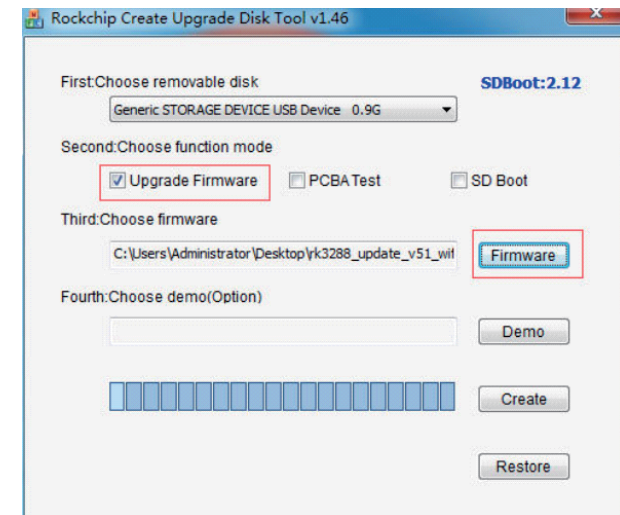
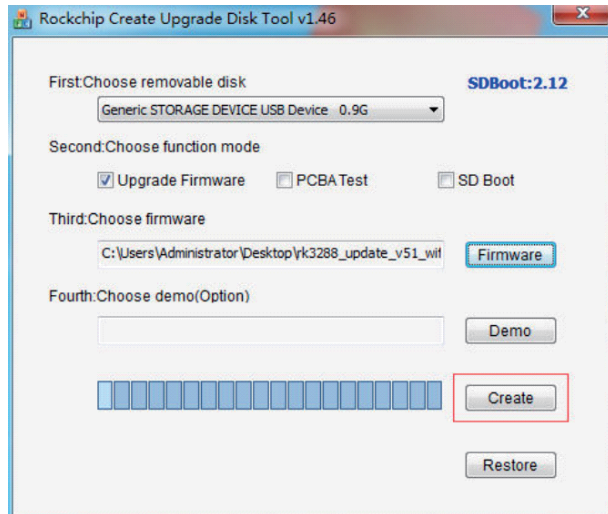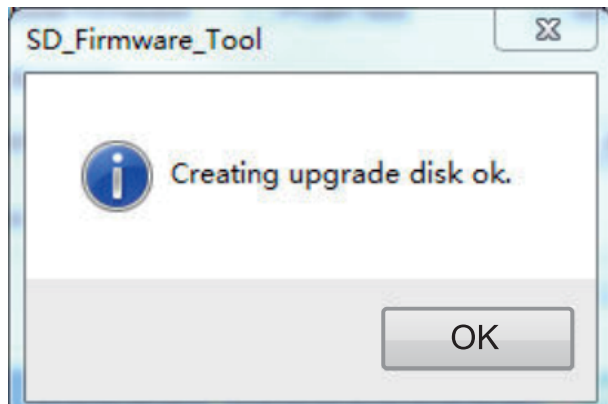（3）Press the "Create" button in the 4th step to start creating the upgradecard. If you are prompted " Failed to format the user disc!", please pressthe "Confirm" button and press the "Start Create" button again to createthe upgrade card.

（4）SD upgrade card production completed.

（5）SD card production is complete, then insert the SD card into theandroid lcd display, power on the display. When the display boot 10seconds later, the remote control light on the android display will flashitself, there will have a android robot and progress bar appear on theandroid display. When the upgraded finished, the screen will turn black,the remote control light on the android display will turn red, then pullthe SD card out. Then you can power the display on.

Problem repair items

Problems	Repair methods
Abnormal screen color	1. Check if the LVDS loose 2. Check if the logic board damage
Double image	The polarity of the screen is reversed. You need to upgrade the screen parameters
Black screen	1.Screen parameters are changed, you need to upgrade the screen parameters. 2.Check if the lift pressure plate or constant current plate is burnt out
Screen lines	Screen is damage, need to change the screen
Unstable Wifi connection	Check the "Router" and the signal
LAN network not connected	1.Check if the network cable is connected properly 2.Whether there is a problem with the LAN port of the motherboard
No signal for HDMI OUT	Check if there is any problem with HDMI HD cable
Problems for touch screen	1.Touch screen lose the drawing lines, Check whether the lines on the touch control card are properly stuck 2.Touch function is not always available, the touch control software needs to be upgraded 3.Touch is often jump-point, to check whether the AC power cord plug is grounded 4.The touch point position is not accurate, it needs to be calibrated by touch software