Q777 User Manual

Ver: 001

Amendment Records

Product name	Version number	Person in charge	Establish/ amend date	Reason for change	The major change contents
Q777	001	Nancy	2024-5-10	N/A	First release

Note:

1. Please fill the form if there is any update.

2. For the first time saving the file, note "N/A" in the "reason for change" and "major change contents" line.

Safety maintenance:

Please maintain your system properly to make sure its service life and reduce the damage risk.

It should avoid the humidity and extreme temperature when being used.

- ☞ Avoid prolonged exposure of the unit to direct sunlight or strong ultraviolet light.
- ☞ Do not drop the unit or let it be in any place with severe shock /vibration.
- ☞ Please avoid the collision as the LCD screen is very easy to be scratched. Do not use any sharp object to touch the screen.
- ☞ To clean the device housing, please turn off the power, unplug the power cord, scrub / wipe with slightly damp soft cloth. When cleaning the screen, please wipe with the lint free soft cloth.
- ☞ Never attempt to disassemble or repair the machine, otherwise the unit may be damaged.
- ☞ Do not place your unit or accessories together with other flammable liquids, gases, or other explosive materials, to avoid danger.
- ☞ Please unplug the power plug if you do not intend to use the device for a long time or in case of thunder weather.

Contents

1. Product introduction

Q777 is an Android-based 7-inch rugged in-vehicle tablet that is powered by RK3568 Quad-core Cortex-A55 processor. The newly designed enclosure provides a good ingress protection rating of IP65. Q777 integrates a variety of communication modules such as Wi-Fi, Bluetooth and GPS. For more peripheral devices, it has a docking station to meet various I/O ports, like RS232, AHD camera, ACC etc.

Features
- 7" Digital touch wide screen, 1280 x 800 physical resolution.
- Comply with IP 65 rating.
- Android 11 operation system.
- Micro SD (TF) card storage.
- NFC
- Camera (built-in) 2.0MP front camera, 5.0MP rear camera.
- Docking station.

Specification

Core

Processor	RK3568 64-bit Quad-Core A55, up to 2GHz
GPU	Mali-G52 800MHz
NPU	Up to 1TOPS
RAM	4GB LPDDR4
ROM	32GB eMMC
OS	Android 11

Display

LCD panel	7-inch IPS, LED backlight
Resolutions	1280 × 800
Brightness	350 cd/m² (typical)
Contrast Ratio	800:1
View Angle (°)	85/85(L/R), 85/85(U/D)
Touch panel	Capacitive 5-point multi-touch screen P-CAP touch technology

Wireless

WiFi	IEEE 802.11 a/b/g/n/ac 2.4GHz & 5GHz
Bluetooth	Support Bluetooth 5.0 BLE
Cellular	
Positioning	Support GPS/GLONASS/BEIDOU

Optional Function

Camera	2.0MP CMOS (front)
	5.0MP Camera
NFC	Read/Write Mode: ISO/IEC 14443 A&B up to 848kbit/s, FeliCa at 212 & 424 kbit/s, MIFARE 1K, 4K, NFC Forum type 1, 2, 3, 4, 5 tags, ISO/IEC 15693 Card Emulation Mode (from host): NFC Forum T4T (ISO/IEC 14443 A&B) at 106 kbit/s, NFC Forum T3T (FeliCa, PN7150 only)
RTC	Built-in
MIC	Internal microphone
Light sensor	Built-in
Compass	Built-in
Gyroscope	Built-in
G-sensor	Built-in
Speaker	speaker 1.5W

Multimedia

Video	Decode: 4K@60fps H.264&H.265&VP9 Profile0/2 video decode, 1080P multi video decode. Encode: 1080P video encoding for H.264 and H.265
Audio	MP3, WMA, OGG, APE, FLAC, AAC etc.

User Interface

Onboard I/O ports	1 x TF card slot(up to 128GB)
	1 x USB Type-C
	1 x Combo Audio Jack (audio+mic)
	1 x POGO PIN (20 PIN)
Extended I/O ports (on pigtail cable)	1 x ACC Input
	1 x Reverse Gear Trigger
	1 x RS232
	1 x RS422 (RS485 optional)
	1 x AHD Camera In
	1 x DC in (9~36V)
Function Key	Power, Menu, Home, Return
Power light	Red(charging), Green(full)

Power Supply

DC In	12V DC (9~36V)
Battery	3.7V 5000mAh, Lithium-Polymer battery pack (run-time up to 3 hours)

Power Consumption

Normal mode	≤9W
Charging mode	≤12.5W

Environment

Operating Temp	-20°C~70°C (w/o battery)
	-10°C~50°C (w/ battery)
Storage Temp	-20°C~80°C
IP Rating	IP65

Mechanical

Dimensions	198(L) x 130(W) x 20(H) mm
Weight	465g
Mount	VESA, RAM, Double-T compliant

Accessories

Standard	AC/DC adaptor or car power adaptor(optional)

Interface

Power

2.0MP CMOS Camera

NFC

M

Menu **Home** **Return**

Power

Flash

5.0MP Camera

SIM Card

Speaker

Micro SD

VESA 75mm

RAM 38mm

POGO PIN

Extended I/O Ports

Type C

Earphone Jack

2.Docking station Definition

Docking Station

1 x AHD Camera In

DC IN

RS422

RS232

ACC

Reverse Gear Trigger

Wires definition
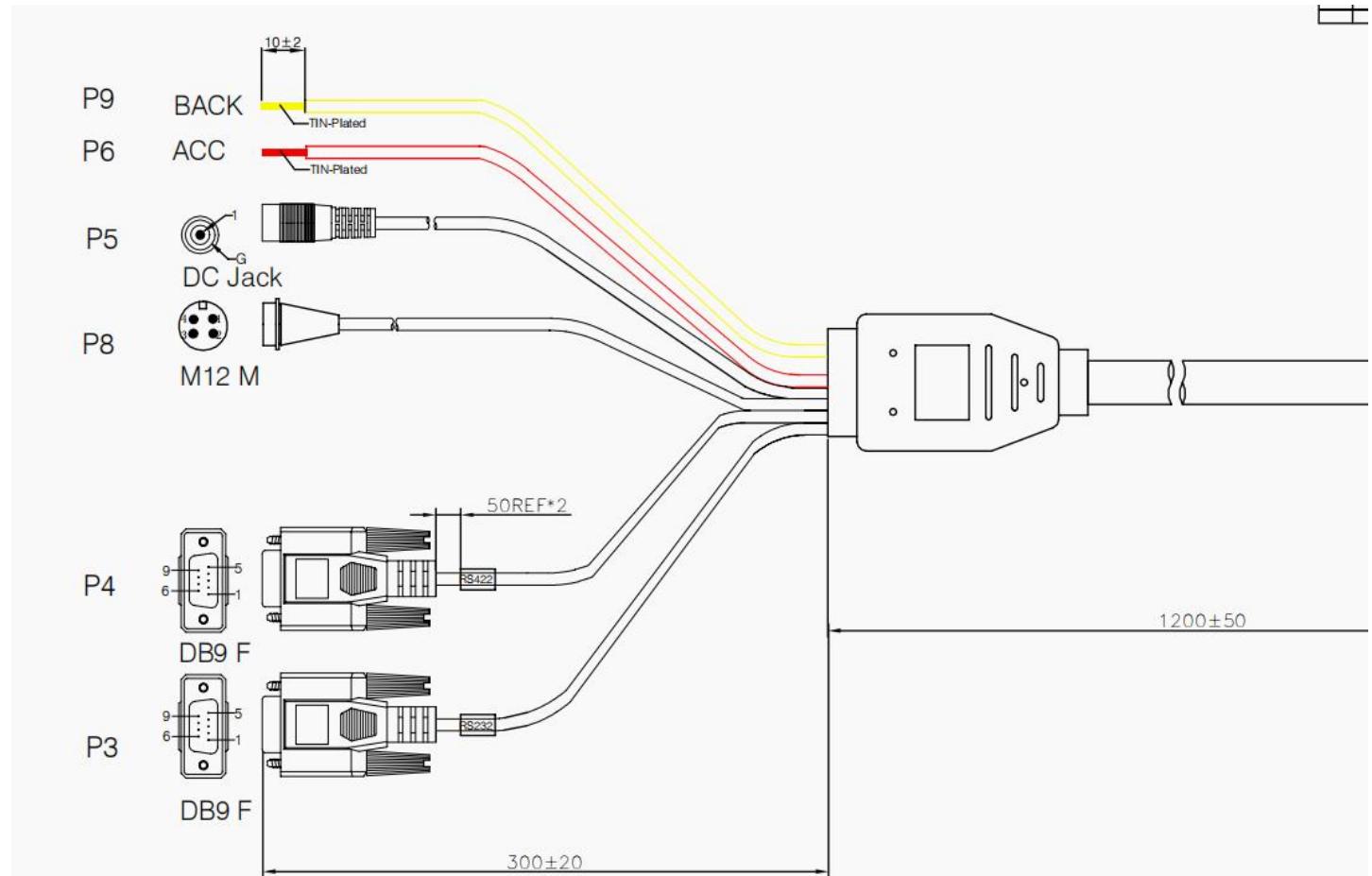
		Wire List							
P1	P2	PIN DEFINE	P3	P4	P5	P6	P7	P8	P9
5		DC_IN(26#)			1				
3		DC_GND(26#)			2				
9	4	RS232_GND(26#)	5&Shell						
	3	12VOUT TO CAM(26#)						1	
	2	GND(26#)						2	
	5	RS232_RX(26#)	3						
1		BACK(22#)							1(YEL)
	8	RS422_RX-(26#)		4					
	10	RS422_TX-(26#)		2					
6		DC_IN(26#)			1				
4		DC_GND(26#)			2				
2		ACC(22#)				1(RED)			
		AHD-IN-1(26#)							
	1	AHD-IN-0(26#)						4	
	4	RS422_GND(26#)		5&Shell					
	6	RS232_TX(26#)	2						
	7	RS422_RX+(26#)		3					
	9	RS422_TX+(26#)		1					

2.1 Reverse gear trigger test

Yellow wire on the docking station is the reverse gear trigger. Connect it with DC connector and the

reverse image will appear.
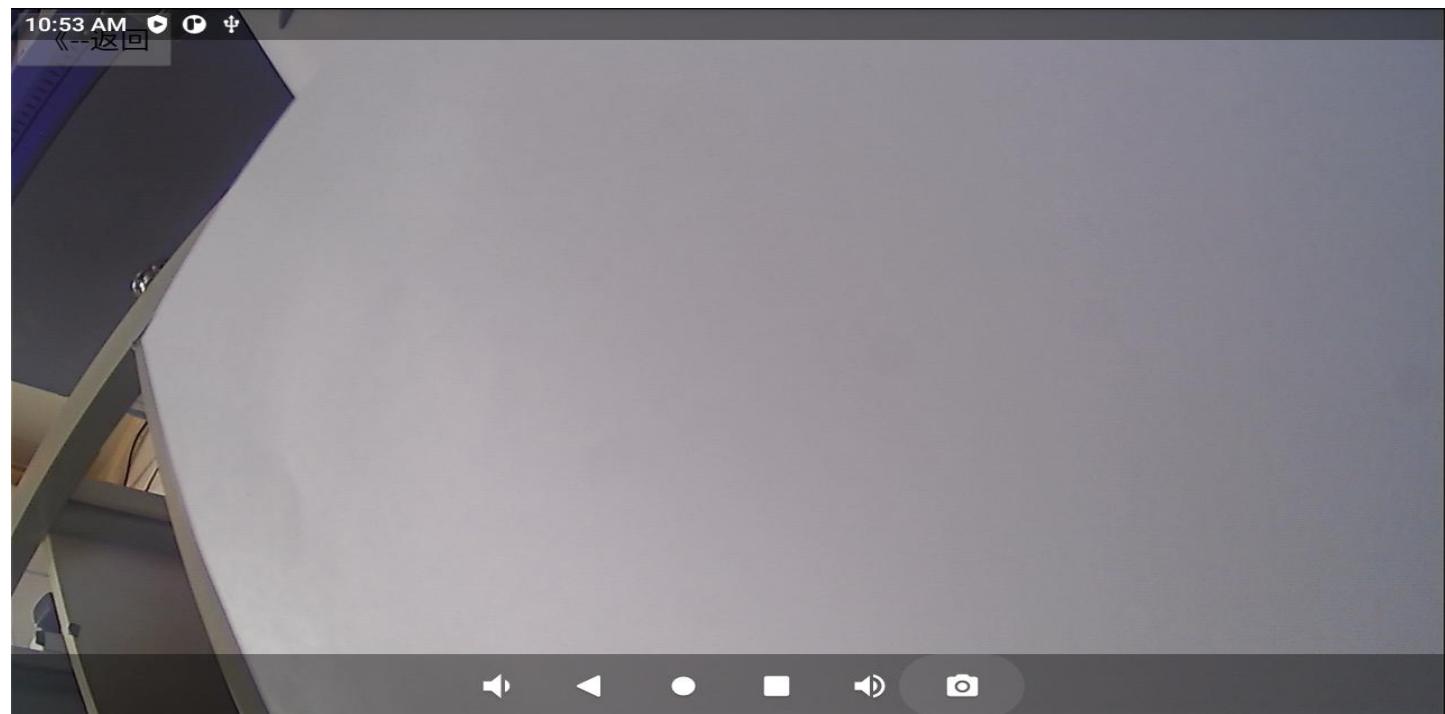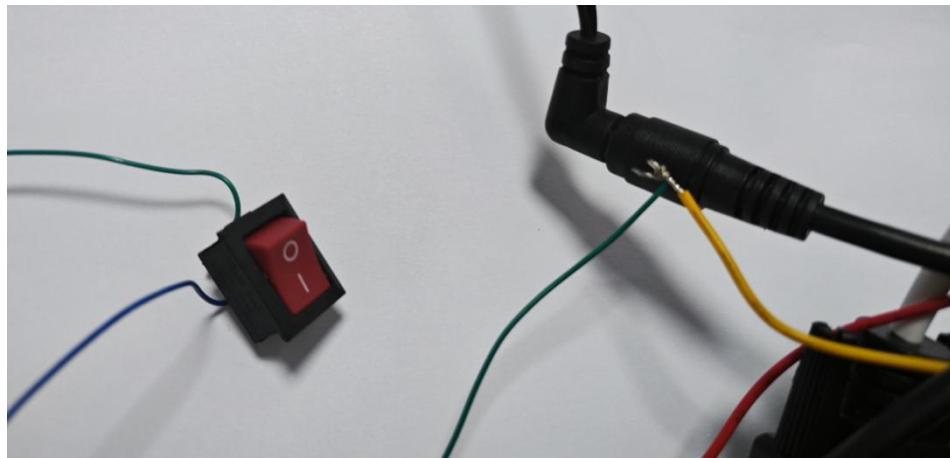
2.2 RS232/ RS422 test:

Connect RS232 or RS422 with DB9 testing jig and click Device_test_RS232, and print the data as below:

RS232

/dev/ttyS5Test B

RS422

/dev/ttyS0Test A
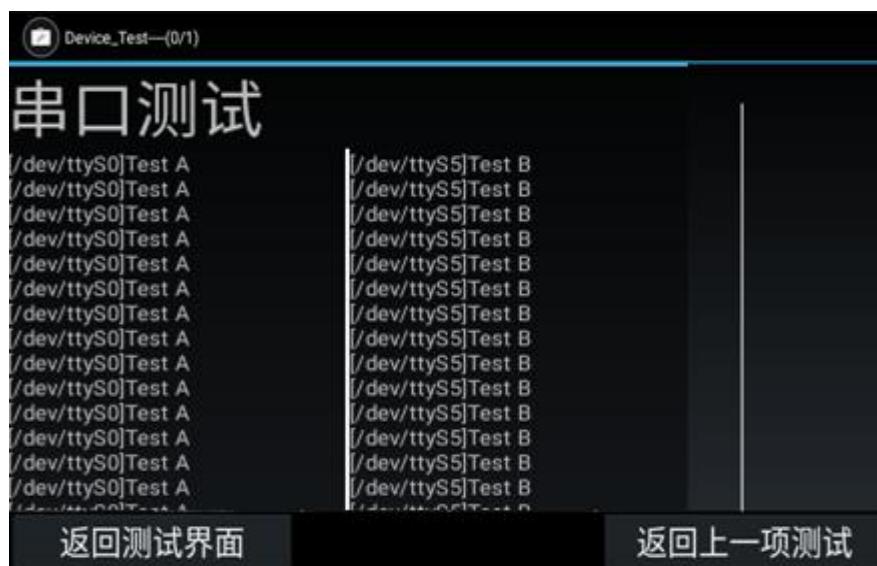
2.3 AHD function test

Connect with AHD camera, open AHD app. Choose different resolution with 25fps or 30fps.
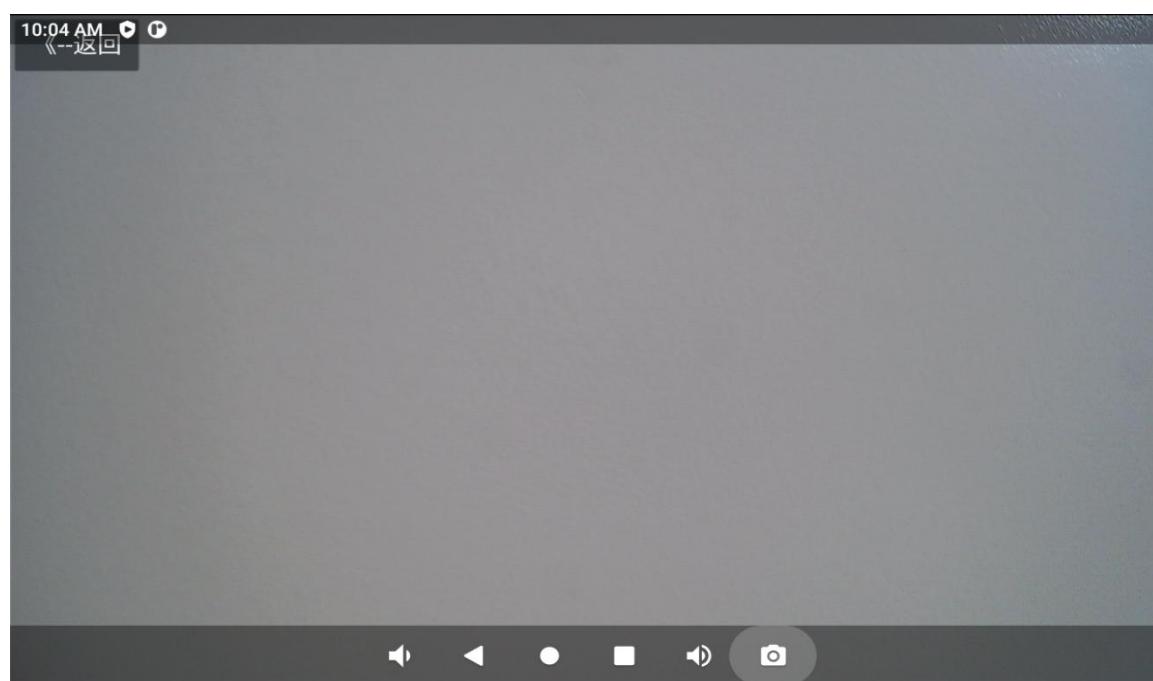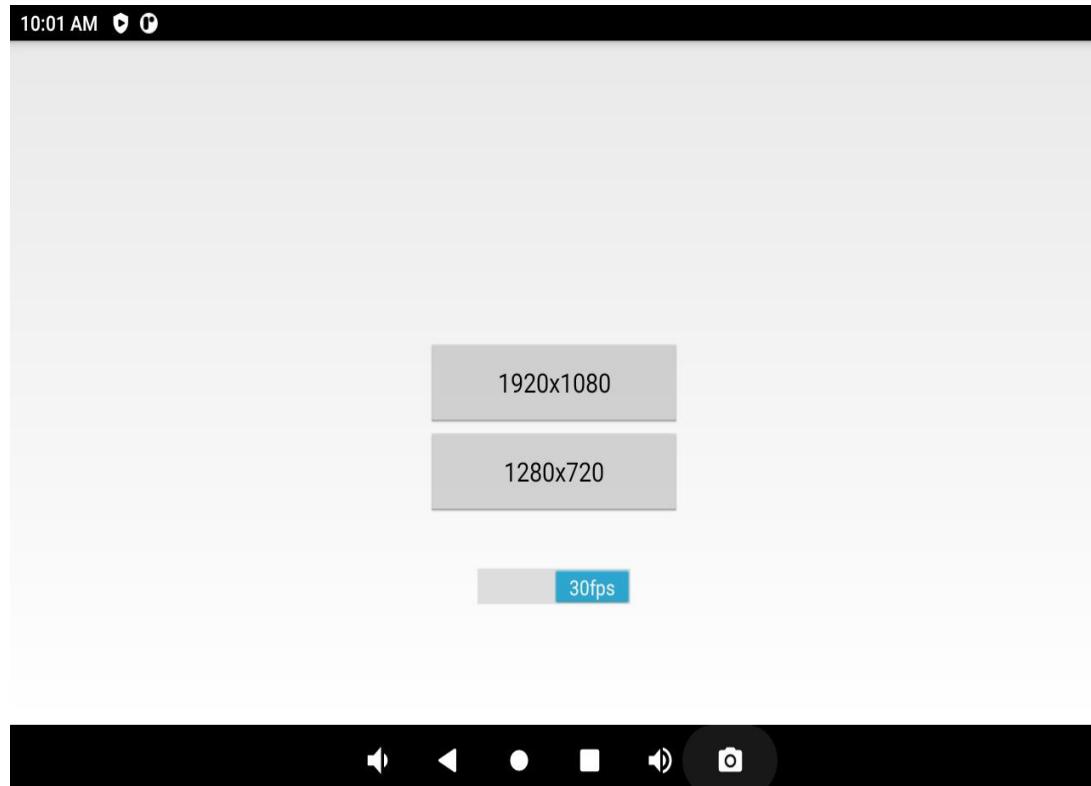
2.4 **ACC test**

2.4.1 ACC Connection Instruction：

connecting the tablet with vehicle power supply through docking station, and connecting ACC wire on extended cable of the tablet with ACC of vehicle.

P6 ACC wire：

ACC Setting Path：Click Settings →ACC Settings →ON
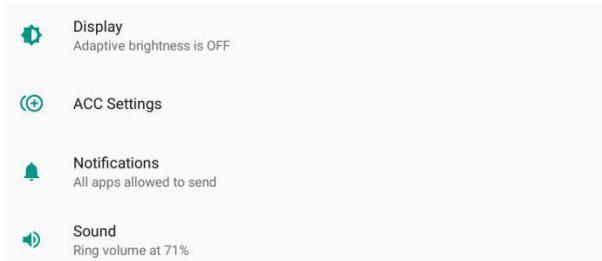
2.4.2 ACC Functions
1. Boot up the tablet by ACC powered.
2. Light up the screen by ACC powered.
3. Close the screen by ACC outage, and setting the delay time.
4. Trigger to shut down the tablet by ACC outage, and setting the delay time.

Note:

a) For the above-mentioned ACC powered and outage, that means level edge trigger, but not trigger when ACC at high level or low level.

b) Function 1 can't be closed by setting within system, Function 2, 3 and 4 can be set by switch of ACC settings within system.

c) There is no individual switch for Function II, switch set by main switch within system setting.

d) After execution of function 3 of ACC, auto sleep function in Q777 system display settings will be invalid. To restore it, user will need to turn off the ACC sleep function and restart Q777.
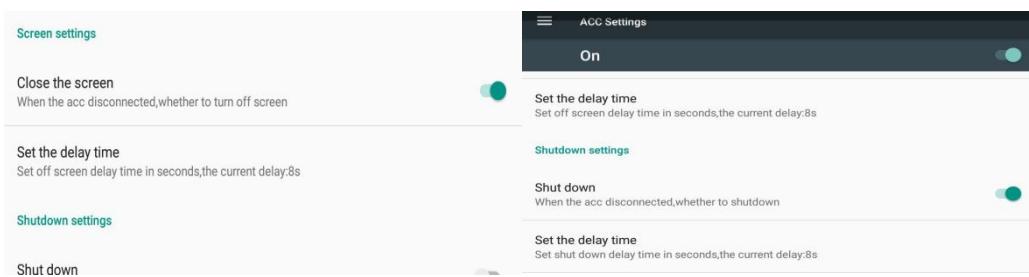
2.5 Mounting

**Fix mount on the roof of the car or bus or on the bracket.**

4. Basic Operation

4.1 Click and Slide:
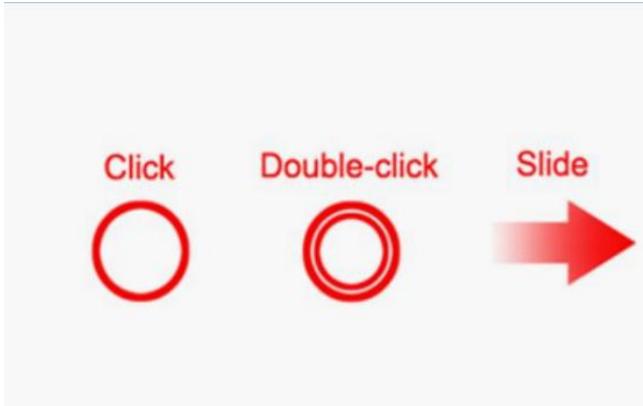
4.2 Long -press and Drag

4.3 Install APK

Settings -- Security -- Unknown sources -- Install APK
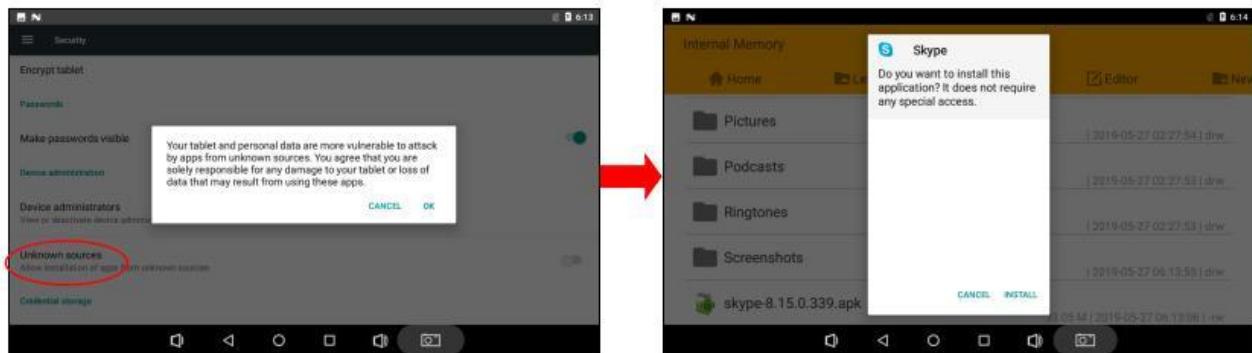
4.4 Delete
4.4.1 Delete Icon
Long-press the application icon, and drag to the Home screen, then drop to the 'X' lift-up to delete this Icon.
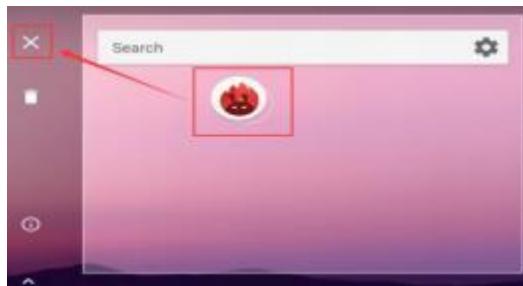
4.4.2 Delete APK：

Long-press the application icon, and drag to the Home screen, then drop to the recycle, lift-up to delete this software.

5.MENU

5.1 Icon Bar
Icon bar shows on the top of screen：

| Icon	Name	Description
	Wi-Fi	Wi-Fi signal connection and status of signal weakness or strength.
	No SIM card	Icon displayed when no SIM card.
	Mobile Network	Network available but not surf the Internet via 2G/3G/4G.
3G		Signal connection and status.
3:25	Time	Current time
	Wi-Fi Hotspot	Wi-Fi Hotspot available
	Bluetooth	Bluetooth available
	Position	GPS positioning
	Flight Mode	Flight mode status

5.2 Menu Setting
Application list
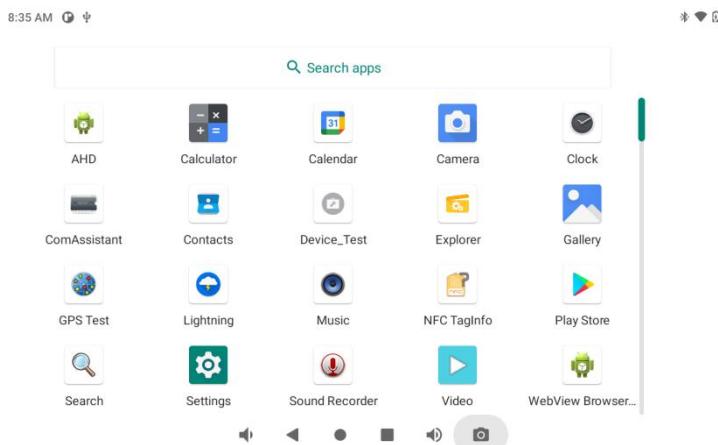
5.2.1 Drop down from the top of the screen to enter notification bar.
The notification bar shows system, running and error notice.
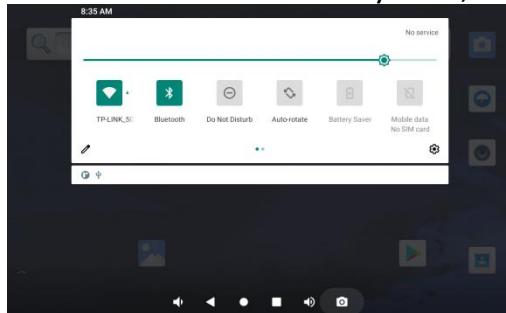
5.2.2 Click 'Settings' to launch setting in the application list
Setting according to users' needs. Click search icon to search function options on the upper right corner of screen. To set Wi-Fi, Bluetooth, mobile network.

☞ VPN , Hotspot , Ethernet functions in 'Wireless & networks' option.
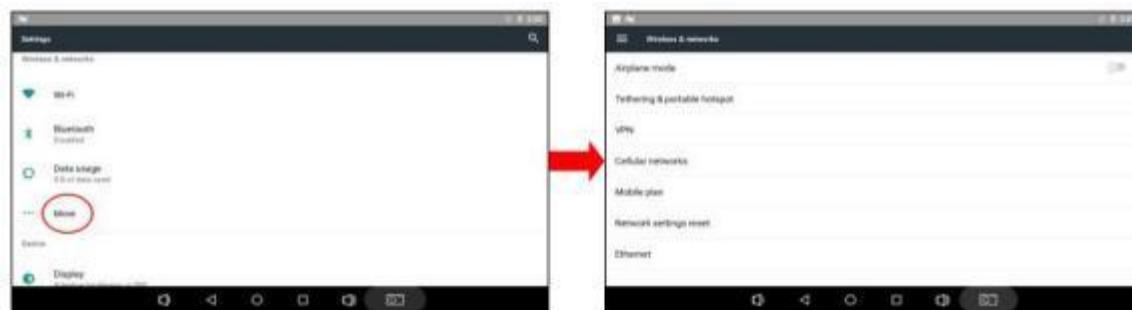
5.2.3 To view and set brightness, sleep time, font, rotation, notification, TF card, USB flash disk and other functions in 'Device' option.

☞ To view and set sleep time
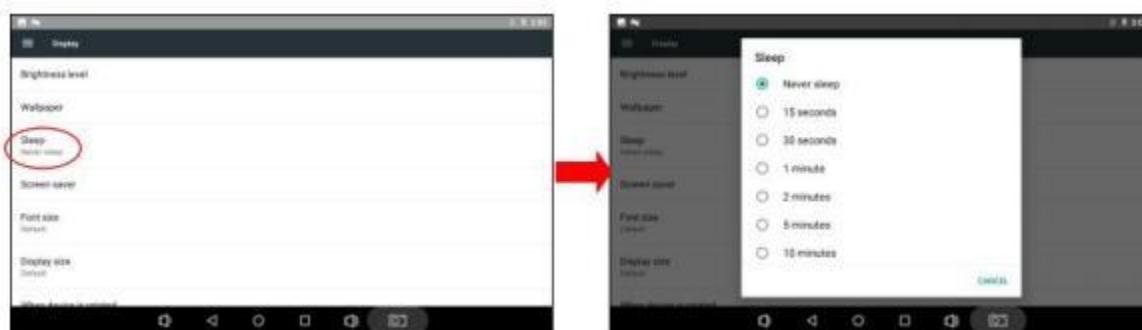
☞ View RAM in the 'Memory' option
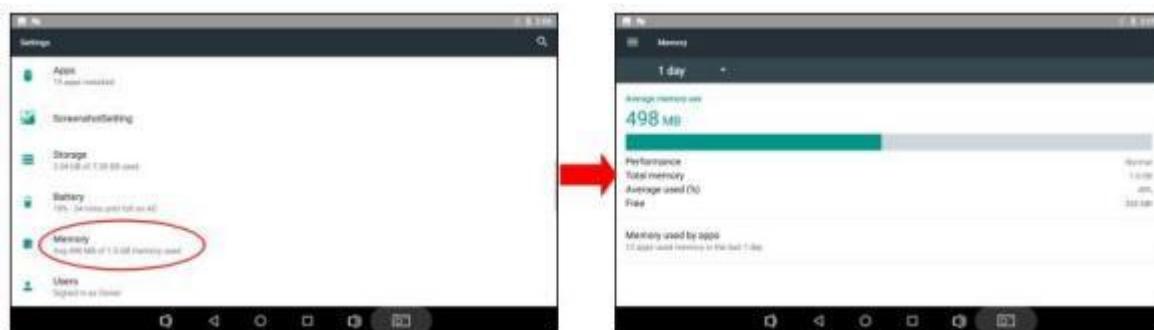
5.2.4 To manage position, screen lock, password, account, language, input and other functions in 'Personal' option. Long press the language you want to switch and drag to the first line.

5.2.5 When unpredictable problems occurred, try to click 'Backup & reset' and 'Factory data reset' then follow the instructions. Device will delete settings and applications after restart, and restore to factory defaults.

(Please backup all important files before reset. Otherwise files will be deleted automatically and restore to factory defaults.)

5.2.6 To set date & time and accessibility in 'System' option. View Android version, Build number, kernel version, status information in 'About tablet ' option.

(Do NOT operate if unfamiliar with 'Developer options')

5.3 NFC
 5.3.1 NFC Setting Path：Click Settings→More→NFC→Open
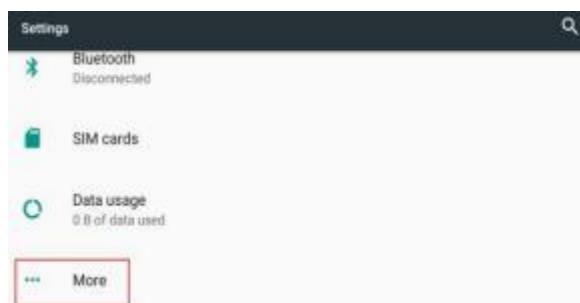
Photo 1
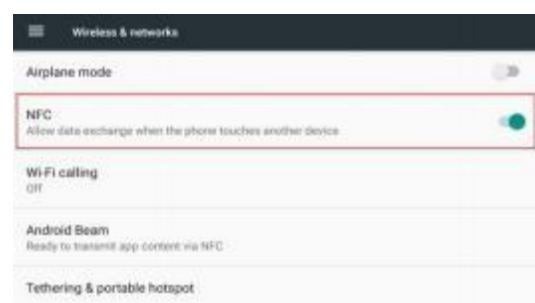
Photo 2

When the NFC is activated, put the NFC card in the tagging area (as Photo 3). If the card is recognized, and will hear the warning tone. If the card contains the information (such as the manufacturer's information). Photo 4 will pop up. Photo 5 is the information of NFC card. (Notice: If the card is recognized, it will not always pop up a box, but it should have warning tone.)

Photo 3

Photo 4

Photo 5

5.4 GPS test

Click GPS Test GPS Test and check positioning and signal status.
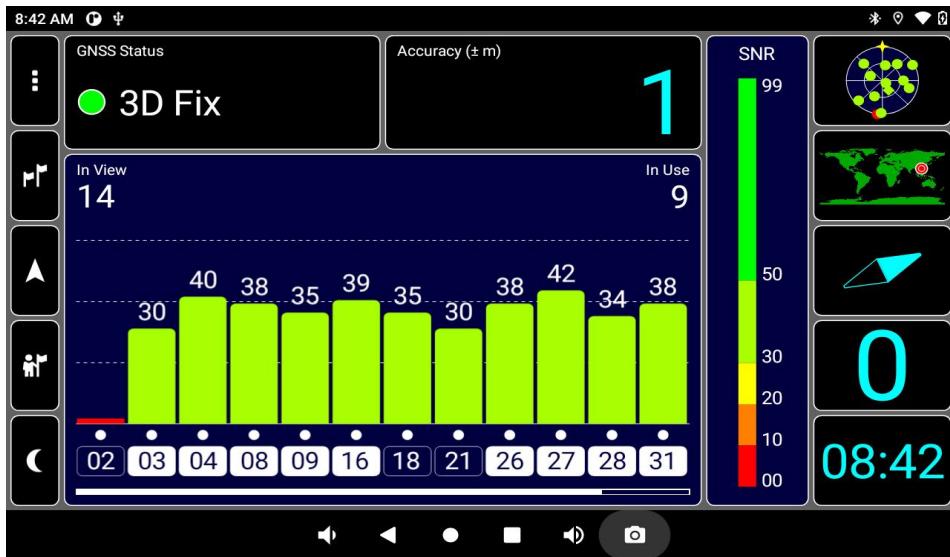
6. Accessories

Standard accessories:
- DC 12V adapter   1pc
- Docking station   1pc

7. Update firmware

7.1 Supported host OS
- Windows 7 (32/64bit)
- Windows 8 (32/64bit)
- Windows 10 (32/64bit)

7.2 Install Rockchip USB Driver
Uncompress DriverAssitant.zip, then run DriverInstall.exe inside.

7.3 Connect Device
7.3.1 Use Type C convert to USB cable and connect Q777 with computer.

7.3.2 Plug in the power

7.3.3 Run AndroidTool.exe: (Note: If using Windows 7/8, you'll need to right click it, select to run it as Administrator)

If AndroidTool defaults to display in Chinese. We need to change it to English. Open config.ini with an text editor (like notepad).

The starting lines are:

```
#选择工具语言:Selected=1(中文);Selected=2(英文)

[Language]

Kinds=2

Selected=1

LangPath=Language\
```

Change "Selected=1" to "Selected=2", and save. From now on, AndroidTool will display in English.

7.4 Flash update.img

7.4.1 Switch to "Upgrade Firmware" tab page. Show "found one MSC device"

7.4.2 Click "Firmware" button and open the image file. Detail information of the image file, like version and chip

7.4.3 Click "Switch" button to change ADB Device to LOADER Device.

7.4.4 Click "Upgrade" button to start flash.

7.4.5 Flash update success，Auto reset device

8. Trouble Shooting

8.1 Power Problem Cannot boot up

● Wrong cable connection:

Connect docking station 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.

● Bad connection:
Check every connection and socket of power source.

8.2 Screen Problem

● No picture on screen.

● The application reaction time is too long and cannot be activated when clicked.

● The image appears delay or still when switching.

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

Display screen is misty.

Please check whether the display screen surface has dust filth or not. Please simply wipe with clean and soft cloth.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Statement: This equipment has been tested and found to comply with the limits for a Class B Digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that Interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user

is encouraged to try to correct the interference by one or more of the following measures:
— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/ TV technician for help.

The equipment complies with FCC Radiation exposure limit set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

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