Wiring diagram

- The unit is designed for 12V DC,negative connect ground.Make sure our vehicie is DC 12V,negative ground electrical system before installation.The sub woofer and automatically antenna of this unit have separate power supply.
- Be sure to connect the color coded wires correctly according to diagram.Incorre-ct connections can cause the unit malfunction,or damage the vehicle electronics system.
- Be sure to connect the speaker(-)to speaker(-) terminal.Never connect the left and right channel speaker cables to each other speaker,or connect to vehicle body.
- To avold the unit damage by over heat,please do not block vents or heat radiating panel.

USER'S MANUAL

Car Multimedia with NAVI System

THANKS FOR PATRONAGE

Thank you for purchasing and using this digital car entertainment product made by us.

To ensure that you can use it correctly, please make sure to read this User's Manual carefully before using and keep it properly for future reference.

Note: We uphold continuous improvement, and we reserve the right to modify any printing errors, inconsistency with the latest information, software upgrade and improvement of the product reflected in this manual. For such changes, we will not notify the user, and will edit them in the manual of new versions.

PRECAUTIONS

▶ 1. Features of the product
   • Operating system:Android 9.0
   • High performance RK-PX5 Cortex A53 Quad-core working platform adopted,with main frequeny of 1.5 GHZ
   • High capacity memory (DDR3):2G
   • Flash memory: 16 GB
   • 4 USB interfaces,2 SD card slots and 4 serial communication ports
   • Video formats supported: MPEG-1, MPEG-2, MPEG-4, H264,H263, VC1, RV, DivX, Sorenson Spark, VP8, AVS Stream, etc.
   • Various music formats supported
   • Resolution of LCD screen: 800*480, 1024*600, etc.
   • GPS/BDS (BeiDou Navigation Satellite System) supported
   • Digital/analog TV supported
   • DVD player supported
   • Music player (with display of frequency spectrum and lyric) supported
   • FM/AM radio supported
   • Bluetooth supported
   • HD video player supported (1080P)

   • 3G wireless internet access supported (with external 3G module)
   • Equipped with WIFI function (Built-in WIFI, and external WIFI module available)
   • Driving recorder (with external camera, and DVR record in SD card of the system)
   • Mobile phones interconnection supported (WIFI and USB)
   • Car reversing back view supported
   • Extension of CAN-BUS interfaces supported
   • 4*50W built-in HF power amplifiers
   • Built-in video in/out
   • HD digital display screen supported
   • Modular structure of the whole system and free functional combinations available
▶ 2. Warning
   • Be sure to take out the GPS memory card after GPS navigation is turned off, and we are not liable for any malfunction of the device if the user does not comply with this in his operation.
   • For installation of the main unit, connect the case of the main unit to the metal part of the car body (fix the cable on the metal bracket of the car

with screws) to enhance stability of the device and extend its service life.
▶ 3. Important note
   • The Android car-borne computer entertainment navigation system is a fully open system. Machine halt and abnormal running of the system and so on caused by third-party software installed by the user and virus are not quality problems of the device.
   • One-key recovery function (Setting-Backup and Reset to recover to default setting) is available in this device. You can recover to default setting to solve malfunctions. Note: The software you install and your files will be deleted then.
   • Power-on time. According to system setting, for cold start, please power it on for 10 seconds continuously to start it up. The power-on period for cold start is 30-40 seconds. If the key is pulled off, power is off and the system is hibernated within 5 days after cold start, it takes 2-3 seconds to start it. The system will be turned off completely 5 days after the last time of use, and restarting will be a cold start.
   • The user can install various third-party application software through 3G internet download and SD card. We do not guarantee that any third-party software can be used normally completely in this device, and the user shall identify and evaluate risks by itself. When a 3G USB internet card is in using state, after the car is ignited and the system is started, the 3G internet card will be connected automatically within 2 minutes, and the indicator on the card will be normally on. If the user does not use the internet function within 2-3 hours, the system will cut off

internet connection automatically. If the internet needs to be connected again, take out the USB internet card and insert it again, or pull off ignition key of the car and insert it 40 seconds later, or turn ON the device to connect to the internet.
▶ 4. Safety precautions
   • Prior to use, read and observe the listed safety precautions to ensure long-term safe and normal use.
   1) The device adopts a car-borne 12V power supply system (ground wire shall be connected). Do not install it on a truck or a bus installed with 24V battery.
   2) Do not install the device on a place hindering vision of the driver or affecting his operations.
   3) Use optical disks of original versions instead of non-standard or inferior ones. Otherwise, faults of the device may occur or its service life may be affected.
   4) For safety's sake, the driver shall not watch programs or operate on the device in the course of driving to avoid a traffic accident (except for passengers' watching programs through rear display).
   5) Do not replace power fuse without the guidance of a professional. Use of improper fuse may damage the device or cause a fire.
   6) The device is made of high precision parts, and it shall not be fiercely impacted, nor shall it be dismantled without permission, nor shall any of its parts be adjusted. In case any maintenance is needed, consult a nearby professional maintenance center.

7) Do not click on the touch screen with a thin and sharp object, for the screen may be damaged in this way.

8) When the panel or TFT display screen is dirty, clean it with soft cloth wetted with medium detergent. If hard cloth wetted with corrosive thinner such as alcohol is used for cleaning, the panel or screen may be damaged.

9) Do not put the product in a humid environment or in water, for electrical shock caused by short circuit, unnecessary damage or a fire may occur.

10) If there is too much dust in the environment, clean the optical head with special detergent for optical head and disk slot regularly.

11) To prevent the electrical bottle from failure of starting the car due to over discharging, this device is set with function of under-voltage protection, and the device will be powered off automatically if voltage of the electrical bottle is too low or too high.

▶ Tips

◆ Read all the instructions carefully prior to installation, and a professional car acoustic equipment dealer is recommended for its installation.

◆ To prevent from any accident, do power off the car and disconnect ACC to B+ before installation.

◆ Do not insert into a small-size CD, a non-standard CD or foreign matter, for the device may be damaged by doing so.

BASIC OPERATIONS

▶ 1. Power on/off

Connect to power cable of the main unit, turn on ACC and the device will be started automatically. Press Power key to mute, and hold it for 3 seconds to turn off power of the device.

▶ 2. Volume adjustment of main unit

In normal condition, press VOL+ to increase volume and press VOL- to decrease volume.

▶ 3. Main interface

Each time the system of this product is started, first it enters the main interface, which can be slid leftwards and rightwards. In any state, press [🏠] on upper left corner to switch to the main interface directly (as shown in the following picture)

Click the icon [▦] on upper right corner to enter task manager. Click the icon [⁝]on the upper right corner to pop out a menu, and click [▭] to return.

Drag downwards, a system notification column will appear on the page:

5. Main menu interface

This car-borne multimedia system provides DVD, radio, mobile digital TV, driving record, internet access, Bluetooth, movie, music, navigation, OEM and external video/audio connection functions. Click the icon [▦]on the lower left of the main interface to enter the interface of main menu. In any other state, press main menu key or press the Return icon on upper right corner to return to main menu also, as shown in the following picture:

FUNCTION OPERATIONS

▶ I. Radio

In other mode, press FM key on the panel, or click[📻] Radio module on the main menu to enter radio mode.
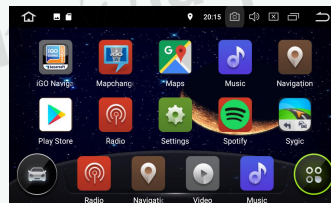
[🔍] Search key: Press it to enter automatic radio search mode, and press it again to stop automatic search.

[▣] Stereo sound switch

[📡] Long/short distance switch

[◀] Hold to move forward by 0.1MHz, and press to search and receive the previous radio station.

[▶] Hold to move backward by 0.1MHz, and press to search and receive the next radio station.

[AM] Switch to AM. AM is amplitude modulation, medium wave broadcasting, and 12 effective radio stations can be stored.

[FM] Switch to FM. FM is frequency modulation, it is general frequency modulation broadcasting, and 18 effective radio stations can be stored.

II. Bluetooth function

Enter main menu of the system and click [📞] or press Bluetooth mode key on the panel to enter Bluetooth mode. When its Bluetooth is paired with the mobile phone, all the icons on the interface will be on and a [⚙] icon will appear on the upper part of the interface.
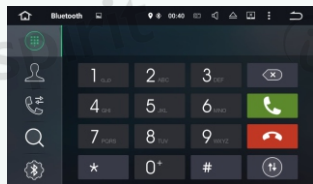
1. Bluetooth dialing interface

[▦]Press this key to switch to Bluetooth dialing interface

[👤]Press this key to switch to Bluetooth phonebook interface

[📲]Press this key to switch to Bluetooth phonebook record interface

[🔍]Press this key to switch to interface of Bluetooth pairing device, and click to search for Bluetooth pairing name

[ᛒ]Bluetooth setting interface

[📞]Answering/dialing key

[☎]Hang up key

[⌫]Dialing deletion key, and hold it to delete by one key

[🔄]Switch key, used for switching between sound of mobile phone and car-born device in Bluetooth communication
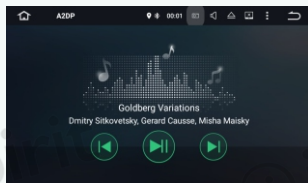
2. Interface of Bluetooth phonebook
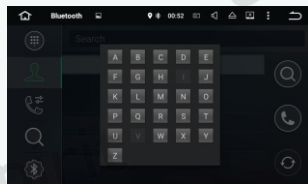
[🔍]Rapid search with initials of names in phonebook

[📞]Dial selected phone number in phonebook state

[🔄]Download phonebook in the mobile phone

3. Bluetooth music interface

Enter main menu of the system and click [🎵] to enter Bluetoohe music mode

[⏯]Bluetooth music play/pause key

[⏮]Play Bluetooth music of previous title

[▶]Play Bluetooth music of next title

III. Play of DVD disks (*suitable for disk device)

On the main interface or in other modes, insert a CD/DVD disk into the disk mouth gently, and it will be sucked into the device automatically, and the device will be switched to DVD play interface automatically.

In the course of CD/DVD playing, click any point on the touch screen, the system will pop out a play control menu.
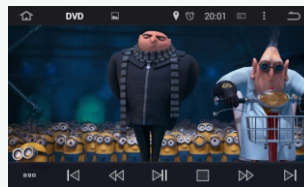
[⏮]Previous title

[⏪]Fast backward

[⏯]Play/pause

[⏹]Stop playing

[⏩]Fast forward

[⏭]Next title

[⚬⚬⚬]Next page

[Custom]Switch of sound effect mode

[Subtitle]Switch of captions: If the CD disk contains many kinds of caption information, click this button to switch between captions in different languages in playing.

[Chann.] Switch of sound channels: Left sound channel, right sound channel, stereo sound

[Menu]Display section, title and room in playing

[🔁]Used for selecting Points A and B for repeated playing

[⊞]Combination key: Press to pop out a direction keyboard and press again to pop out a small number keyboard

IV. Video playing

Click [🎬]video function module to play video files in the system or multimedia files in external SD card or USB device; H 263, P3, MPEG-4,

Simple Profile, H264 and AVC formats are supported. The video playing interface is as follows:

[⛶]Full-screen button

[⏮]Previous title

[⏸]Play/Pause

[⏹]Stop key

[⏭]Next title

[☰]Files in video list

V. Music playing

Click [🎵]music playing function module to play video files in the system or audio files in external SD card and USB device, and WMA and MP3 formats are supported.

1) Introduction to music playing function interface:

[Custom]Switch of sound effect modes

[⏮]Previous title

[❚❚]Play/pause

[⏭]Next title

[≣]Music playlist

[▦]Switch between lyric and frequency spectrum

[⟳]Music playing mode

2) Drag music/video interface from right to left to display playlist, and drag it from left to right to display folder management
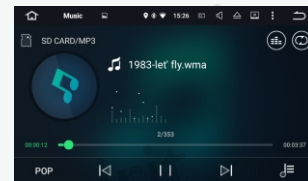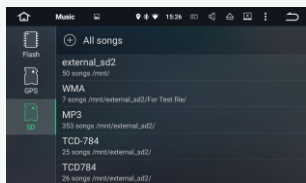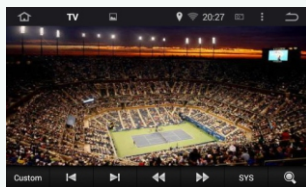

▶ **VI. TV playing** (*suitable for device with TV function)

Press TV key on the panel or enter the main menu and click [📺] TV mode to enter mobile digital TV interface, as shown in the following picture:


[⏮]Station selection upwards: In TV playing, press this key to enter playing of previous TV program

[⏭]Station selection downwards: In TV playing, press this key to enter playing of next TV program

[🔍]Search key: Press this key to enter automatic search interface

▶ **VII. Picture/picture library**

Click icons of [🌸]Pictures or [🖼]Picture Library to enter playing mode of Pictures/Picture library list. The pictures are all pictures in the memory or SD/USB device; In the picture library, apart from loading pictures in the memory, video files stored in SD/USB device can also be played, as shown in the following picture:
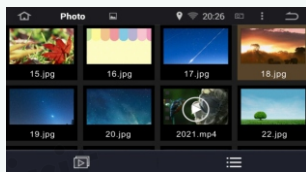
▶ **VIII. iPod** (*suitable for device with iPod function)

Through the connecting cable for iPod, Android application can control playing of iPod. Click [📱]to enter iPod application, as shown in the following picture:
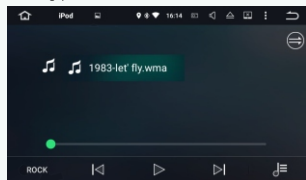
▶ **IX. Navigation** (refer to actually installed navigation software)

◆ Navigation software supported: RITU/Amap/MXNavi/Careland

◆ Map upgrade: Through SD card

◆ Supporting: 3D navigation actual-scene map

◆ Supporting: Mixed navigation sound

▶ **X. File manager**

Click on the icon [📁]of file manager on the desktop to enter the interface of file manager, as shown in the following picture:
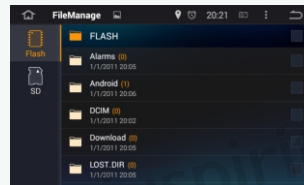
▶ **XI. GPS map**

First, install the installation package of GPS map in APK manager. Refer to specific operating instructions for GPS operations.

▶ **XII. 3G internet access**

Insert a USB 3G device, a 3G icon [🔲]will appear on the top automatically about 30 seconds later, telling the user that 3G internet access is available.

▶ **XIII. AVIN**

In effective input state of auxiliary device, click icon [🔵]on the main menu to switch to AVIN mode, as shown in the following picture:
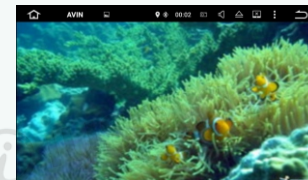
Mirror Link

▶ **1 . Airplay(Apple phone) connection**

1). Click [🔲] to connect

2).Turn on the iPhone Hotspot

3). Choose from hotspot iphone interface on the left. Connect to the iphone Hotspot

4). Turn on the iPhone AirPlay

5). Select Car player's name, and turn on the Mirror

6). Once connected, the phone's video and music can be push to the Car player

▶ **2. Android phone connection**

1. Please ensure that the following work has been done for the initial connection with the phone.

① Turn on the phone (USB debug switch) → ② Turn on the Blue-tooth and ensure the match with the vehicle terminal. → ③ Connect the USB cable correct. → ④ Connection completed.

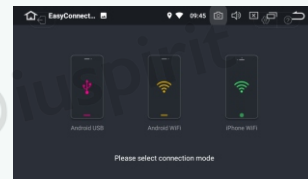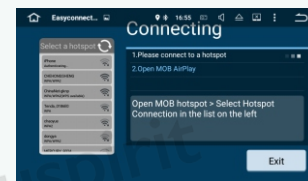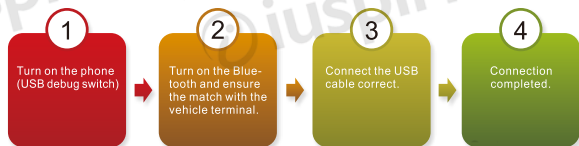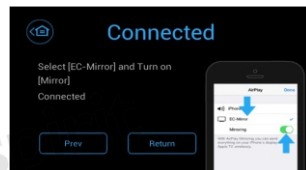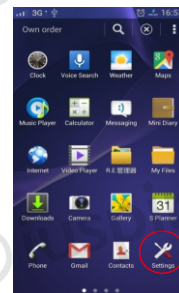1). Please turn on the phone(USB debugging switch) before connection. Then push aside the cape of the phone USB interface and reinsert.

• Correct setting of the mobile phone is required, and the setting is not so complicated. Once setting ready, it is not needed to set again.
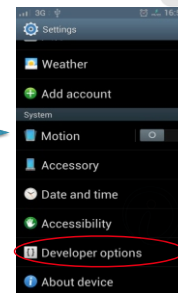
1. Enter setup.   2. Click "Developer operations".   3. Check "USB debugging" and developer operation switch.
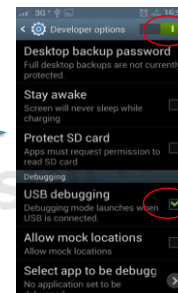
• During opening " developer operations ", some mobile phones may be not equipped with option. You may enter "about device" and click "Android version " or "software version No." for 8 times, and then " developer operations " will be displayed in the previous menu.

2). The Bluetooth connection between the phone and the vehicle terminal enables users to answer and dial phone conveniently while using the software. It also supports transmitting phone audios to vehicle terminal through A2DP protocol and playing the audio contents with car loudspeaker. Please refer to Vehicle Terminal Use Manual for detailed procedures of setting up Bluetooth connection between phone and vehicle terminals.

3). Please reconnect the phone with the vehicle terminal USB interface after the above settings.

2. Click the [   ] icon on the vehicle terminal to start the software,and ensure the phone is at the state of unlocked screen. When vehicle terminal is linked to the android phone, vehicle terminal screen will enter the Easy Connected state.
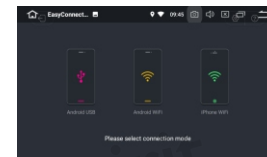
INSTALL SOFTWARE

Click icon [ ] to enter APK installer, select Install, find the file installation package in the storage path of the installation file, and install it as per the prompted steps.

OBD CONNECTION

Find icon [ ]on the main interface, enter OEM, find torque.apk and install it. After installation is successful, search for name of OBD through Bluetooth and connect it. Then click icon [ ]on the main interface to enter OBD. After setting connection type of OBD adapter and address of Bluetooth device, connection will be successful.

FUNCTION SETTING

Click setting icon[ ]on the desktop to enter setting interface and set WLAN and internet, device, user, account, system and car-borne device, etc.
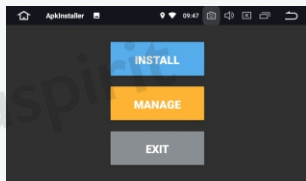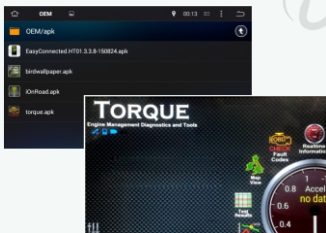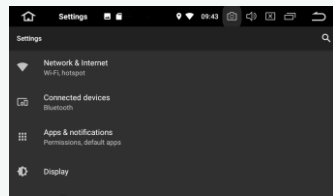
◆ **1. Wireless&Networks setting**
1) WLAN setting: Click to enable or disable.
2) Bluetooth setting: Tick automatic connection or automatic answering. And PIN code can be set according to needs.
3) More: More network setting, including Ethernet, VPN, portable hotspot and mobile network.

◆ **2. Setting of device**
1) Sound: key sound and volume.
2) Display: Brightness, wallpaper and screen videotape recording are set on this interface.
3) Element setting: Panel, colors of LED light of keys.
4) Screen-shot setting: Delayed screen-shot setting, screen-shot picture storage position and display of screen-shot button on status bar.
5) Storage setting: With installation position and total capacity at the first.

◆ **3. Personal setting**
1) Security: Device management, bills storage and user experience plan
2) Language and input method: Set language and input method.
3) Backup and reset: Back up my data and recover to default setting.
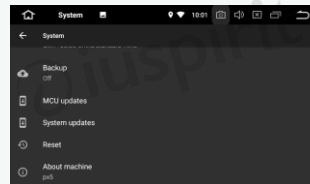
◆ **4. Account setting**
Add accounts: Add current account and create new accounts.

◆ **5. System setting**
1) Date and time: Select to determine time and time zone automatically.
2) Auxiliary function: Speak out password, words turning to sound output, touch and press for delay.

◆ **6. System setting**
1) GPS: When GPS applications and navigation music are being synchronized, background sound and GPS mixed sound ratio and size can be adjusted.
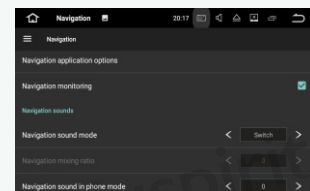
2) Driving setting: Video setting, rear view horizontal mirror, rear view sound, reversing track and auxiliary radar display for car stop.
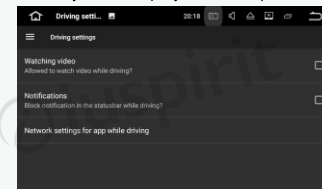
3) Expansion setting: Shutdown delay when ACC off, media setting and driving record storage position.

4) Amplifier setting: Sound stage setting and sound field setting.

5) Study of steering wheel: Click setting to enter steering wheel study interface. Click steering wheel key to study and click [OK] to save it and exit, and restart the device as shown in the following picture:
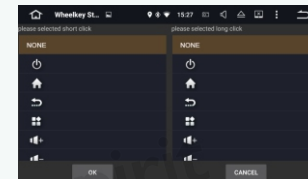
SPECIFICATIONS

SPECIFICATIONS:

Operating voltage: DV12V

Operating voltage range: 9V-15.5V

Max. Operating current: 15A

Standby current: ≤10mA

VIDEO SECTION:

Pattern: NTSC, PAL (automatically identifiable)

Output: 1VP-P (75Ω)

Input: 1VP-P (75Ω)

PLAYING WITH DVD/CD PLAYER:

Compatible formats: DVD-R, DVD-RW,DVD+R, DVD+RW, CD-R, CD-RW, Mp3, WMA, HDCD, SVCD, MPEG, JPEG

Audio SNR: 85dBA

Dynamic range: 95bB

Frequency range: 20Hz-20KHz (3dB)

Digital audio sampling: 24bit

Electronic shock protection (ESP):

DVD: 2-3 seconds

CD-DA: 10 seconds

MP3: 100 seconds

WMA: 200 seconds

Mechanical shock protection: 10-200KHz, X/Y/Z:1.0G

Power output: 50W*4

Input impedance: 4Ω

SNR: 70dBA

FM RADIO SECTION:

FM range: 87.5MHz-108.0MHz

SNR(-50db): 15dBu

Sensitivity (-30db): 10dBu

Frequency response range: 30KHz-15KHz (3dB)

ENVIRONMENT TEMPERATURE:

Working temperature: -20℃-+60℃

Storage temperature: -30℃-+70℃

Working humidity: 45%-80% (RH)

Storage humidity: 30%-90% (RH)

♦ We are dedicated to improving quality of our products. No notice will be issued in case of any change of design or specification of our products. We do our best to ensure pictures and introduction of our products to be as accurate as possible. Should there be any difference between printing patterns and technical parameters and actual products, actual products shall prevail.

TROUBLESHOOTING

Problem	Cause analysis and solution
The device cannot be powered on	Check if power supply fuse is burned and replace with a fuse of proper capacity when necessary
TFT display is in disorder or any button does not work	Press Reset key on the panel
Radio station cannot be received	Check if the antenna is inserted in properly or if the antenna is accepted or not. In this case, insert or accept the antenna properly.
Radio station receiving effect is poor	Length of the antenna may not be set properly. Check if the antenna is stuck out completely or is broken. In this case, replace with a new one. If broadcasting signals are too weak, change a station with strong signals. The antenna is poorly grounded, confirm if the antenna is grounded properly.
Disk cannot be loaded	If a disk is loaded, just exit it. A small disk is loaded. Small-sized disks are prohibited being loaded into this device.
Noise	The disk is damaged or dirty. Replace with a qualified one.
No picture from video output	The video cable from the main unit to TV set is not connected properly.
Picture jumps	Color system is not set correctly. Set color system as PAL or NTSC according to actual condition of the TV set.
Bluetooth function does not work	Check if Bluetooth mobile phone is paired with and connected to the device correctly, and pair and connect again in accordance with the user's manual of the mobile phone.
Bluetooth call echoes too much	Volume is too large, and decrease it appropriately.
Intermittent sound of Bluetooth mobile phone music or calls	Check if the Bluetooth mobile phone is too far away from the device, and put the mobile phone in a proper place within 5 meters from the device.
Video in SD card or flash disk cannot be played	Too many video file formats are available currently, and we cannot guarantee that all formats can be read. This device can read SD cards and flash cards with max. capacity of 32G.
Contents in hard disk cannot be read	Output current of this device is not enough to a drive mobile hard disk, except that power of the mobile hard disk is supplied independently.
iTouch and iPod cannot be played	Check if the connecting port is loose or not.

♦ Note: If the problems remain unsolved with the above methods, ask for service from the local dealer, and unauthorized disassembly and repair are prohibited.