User's Manual

Before operation, please carefully read the instruction manual

Android4.1.1

IN CAR MULTIMEDIA&GPS SYSTEM

















CATALOTUE

1. Quick Review 1 1.1 Turning On and Turning Off 1 1.2 Panel Function Button 1 1.3 Tips for Using Touch Screen 2 1.3.1 Clicking Function 2 1.3.2 Pressing Function 2 1.3.3 Dragging Function 2 1.3.4 Zooming Function 2 1.5 Status bar indicator 3 1.6 Text Entering 3 1.6.1 Switch on the Entering Method 3 1.6.2 Android Keyboard Input 4 2. Function Operations 4 2.1.1 Steering Wheel 4 2.1.2 Screen Calibration 5 2.1.4 factory settings 5 2.2 Navigation 5	2.7 AUX IN Function 18 2.8 Rear View 18 3 Firmware Upgrading 19 3.1 preparing for upgrade 19
2.1.2 Screen Calibration 5 2.1.3 Navigation application 5 2.1.4 factory settings 5	2.6.7 Digital TV

The use of certain features of these devices depends on your network service provider's network settings and performance. In addition, due to the different network service providers, some certain functions of this device may not be able to apply or restrict to apply. And please contact your network service provider for consulting the network functions and availability of this device



This mark indicates that the product used a label which is classified CLASS1 laser, indicating that the device uses theweakest level of laser beam, and there is no risk of radiation outside the unit.

1. Quick Review

Warning: Before using this device, please read the manual safety and law information.

1.1 Turning On and Turning Off

Turning On	When you plug in the car keys, switch on ACC START or the car's ACC power, the device will be automatically turned of displaying the boot animation LOGO.	
Turning Off	When you take off the key, switch to ACC OFF, or turn off the car's ACC power, the device will automatically beshut down.	

1.2 Panel Function Button

Icon	Button	Funciton	
PWR/VOL	Power/Volume	In the off state, press this button short, the system is turned on. In the boot state, press this button short, the system becomes mute; press this button, the system is shutdown	
		③ Turn this button clockwise, the volume is increased④ Turn this button counterclockwise, the volume is decreased.	
номе	Main Interface	Click to enter into main interface.	
MENU	Main Menu	(1) In each function, extended manipulation of information, press the MENU key to pop up; (2) In the main interface, press the MENU key for the system to quickly set function	
BACK	Back	Click to back to the last interface.	
NAVI	Navigation	Click to enter into GPS navigation interface.	
DVD	DVD Play	Click to enter into disk play interface.	
PHONE	PHONE	Click to enter into Bluetooth telephone interface.	
RADIO	RADIO	Click to enter into radio interface for receiving FM1/FM2/ AM radio	
TUNE	Compound	 in the audio and video playback interface, up / down one player In the radio interface up / move down frequency 	
A	In/Out Disc Button	disk in and out	
SD	SD Media Card slot	Insert the appropriate memory card ,multimedia file slotsystem can read the card	
USB	USB Socket	Connect other devices by USB socket. Connecting an external WIFI/3G dongle	
RESET	Reset Button	and the second and an along	
MIC	Microphone	Receive voice from bluetooth telephone call.	

Remark: All long press means press time at least lasting 3 seconds; Button and socket is different according to different car types, please take real type as standard.

1.3 Tips for Using Touch Screen

When using the touch screen, you can use several ways to perform corresponding operations on the device.

1.3.1 Clicking Function

You could select an application icon or option on the screen to realize clicking function. For example, click Bluetooth to enter into bluetooth application.

1.3.2 Pressing Function

You could press the current user interface, icon, inputting column by pressing function. For example, press on the blank area of the main interface, then comes a pop-up menu, you could perform some function

1.3. 3 Dragging Function

Drag the touch screen or press the scroll bar for up and down operation. For example, browse the contact list of the bluetooth phones by dragging function.

1.3.4 Zooming Function

When browsing the web, click the screen twice, then you could zoom in or out the page content. Or you could press the screen with two fingers by control the sliding distance between the fingers to zoom in or out the page content.

1.4 Main Screen

You can use the touch screen operation to use the various functions of the device. This equipment has a total of five main screen, left or right sliding can be switched with each other. Any interface press the HOME physical buttons on the panel to return to the main screen interface, and display the application

icon in the main screen interface, click any application icon to open the program.



Note: You can add the freedom of the space of the main screen or Remove Programs icon to see equipment Basic Settings section. Click the application icon; you can view all of the programs of the equipment.

1.5 Status bar indicator

Icons on the left top of the screen are notifications for messages and events; Icons on the right top of the screen are device status indicator.

If there is new message, it will be displayed on the status bar, slide your finger gently from the status bar, all prompts would be displayed. Then you could click the message and view the content.

Indicators the left Description		Indicators on the right	Description
a	Network signal strength	31	Network signal
New Message		₹.	USB connection instructions
♥ WIFI signal indicator		4:25 PM	Current Time indication

Tip: You can tap and hold the status indication bar to view the current day.

Note: The device software is under upgrading, the status indicator may be different with your device; please refer to the actual device software.

1.6 Text Entering

When edit text, you could use existing method of entering and Android keyboard to edit English, numbers, and symbols etc., such as editing message, searching key words etc.

Tip: The display format would be different according to different status and keyboard of the entering, please refer the actual one

1.6.1 Switch on the Entering Method

Open the text editing interface

Click in the editing area, then the editing menu would appear.

According to the input method, input method you want to use the midpoint of the input method menu, you can choose the Android keyboard or install third-party input method.





1.6.2 Android Keyboard Input

Switch the input method into Android keyboard (see switch input method)

Remark:

- 1. You can click the number sign key 7123 to switch to numbers and symbols input mode.
- 2.Click to switch letter case.

2. Function Operations

2.1 General

2.1.1 Steering Wheel

Users could set the steering wheel according to hint.

Note: Steering wheel interface is special for cars with buttons, but some cars' steering button are not able for study but by "can", such as Ford MONDEO

Application>Setting

- > General Settings
- > Steering wheel Settings



VOL+	VOL-	MUTE	MODE
номе	MENU	BACK	NEXT
PREV	ANSWER	BRIGHTNESS	NAVI
RADIO	EJECT	AUDIOOFF	DISC
START	RESERVE	RESERVE	CLEA

Steering Wheel Interface

- a. First to click "Start"
- b. Click the buttons as you want.
- c. Click the corresponding button on the wheel, if the study displays successful, there will be a change on the corresponding color on the main screen.
- d. Repeat step 1 and 2 till you complete all the buttons' setting on the steering wheel.
- e. Click "END" to ensure that the steering wheel setting is completed. If you want the steering wheel button to re-learn, press the [CLEAR] Repeat a, b, c, three steps

2.1.2 Screen Calibration (For resistive screen only)

Applications> Settings

- > General Settings
- > Touch screen calibration

Enter the calibration screen to calibrate the screen interface, please click as close as possible to the cross until a successful calibration, then exit the calibration screen.





2.1.3 Navigation application

Select appropriate map application, then it can beassociated with the navigation button on the physical andnavigation icon on the main screen.

Applications > Settings

- > General Settings
- > Navigation options
- > For example: GO





2.1.4 factory settings

When the system is unable to work or there is problems after user used the system, it can be restored to the factory settings. Once it's restored to factory settings, all the third-party software would be deleted, and the current system settings would be lost. For navigation software, justneed to install corresponding APK. Please operate carefully.

Applications> Settings

- > General Settings
- > factory settings

2.2 Navigation

2.2.1 Navigation Software Installation

- 1. Copy the application program with suffix name "APK" to SD card or U disk. There are two installation methods:
- \bigcirc Click into the document management interface to find SD card or U disk directory and select "APK" and click install directly.

Applications> File Management Interface > Expansion card or U disk



File Management Interface

②. Extra Interface->Application Program->Install Application Program Select the application program with suffix named "APK" and install.



Application Program Interface

Application > Settings

- > Applications
- > Application Program Installation

Note: Please copy the navigation map software to the system storage memory first, and then install the navigation

APK. Steps are as follows:

- ①. Insert navigation data packets to the SD card or a U disc
- ②. Start the ES file browser (or other document management software)
- ③. Enter the 'sdcard/Favorites/mnt/usb/mmcblk1p1" (SD) or Favorites / mnt/usb/mmcblk1p1" (U-disk) directory, find the navigation packet directory (forexample: APK (3rd party application)), long press the directory and select "Copy" in pop-up menu
- 4. Go back to the "/sdcard/" directory, choose the paste command
- ⑤. Waiting for the copy is complete (30 minutes approximately /3.5G)







2. After successful installation required to choose you need to use the navigation application program, association panel on navigation physical keys NAVI and interface of the main navigation application icon (see 2.2.4navigation options).

2.3 Radio

2.3.1 RADIO

Press the RADIO button on panel or click the icon on the main menu to enter the radio interface, the specific functions and operations are as follows:

Radio Interface

The functions of Icons in the radio interface are described below:



Icon	Button Name	Function Description
BAND	Band Switching	Click BAND to switch between mode FM1/FM2/AM.
M	Search Channel Backwards	Click to search channel backwards then stopwhen find clear channel
K	Search Channel Forwards	Click to search channel forwards then stop whenfind strong and clear channel.
SCAN	Scan all Channels	Scan automatically and save channels(Coupled with a scanning radio signals broadcast for 10 seconds, no signal of the radio scan play 3 seconds)
LOC DX	Locate and DX	Change between locate and DX models.
EQ	Audio settings	Click enter the EQ setup
87.50 мнг	list of radio stations	List of radio stations, according to the storage for the playing frequency point
\	Forward tuning	Forward tuning radio
>	Back tuning	Backward tuning radio
M	Main Menu	Click to back to main menu.
. 5	Back	Click to go back to last interface.
ĄS	Automatically search	Search and save band automatically.

2.3.2 RDS

Radio interface with RDS Icon details as below:

TĄ	Traffic Announc ement	Click TA symbol to light up, it can source automotive the station which can broadcast traffic information, the system will source once every minute, it will stop to display traffic matter when we get the news; and it will directly go back to the situation after traffic information displays.
AF	Alternative Frequencies	Click AF symbol to light up , RDS can swift to the station which has stronger signal when the frequency is weak, but the content of RDS station will not change, just move to the other frequency. Meanwhile it only can source RDS station.
PTY	Program Type	Click PTY symbol to light up , RDS radio display type When the received RDS station, the corresponding PTY information is automatically displayed.
REG	Regional Link	Click REG symbol, it will only search the RDS stations with the same national area code (PI 8-bit representation of the high country area code) of the current RDS station. If REG is not highlighted, you can search RDS station while ignoring the area code (excluded the high 8-bit PI code)

2.4 Bluetooth Wireless Connection

You could create a wireless connection between a mobile phone and this device for data exchange,

Note: ①.There may be prohibition or restriction for Bluetooth devices, please abide by local laws,

@. In order to ensure blue tooth security by the greatest degree, you should in safe and non-public

place when connecting a bluetooth device.

2.4.1 startup bluetooth application

Under the default status, the bluetooth would be turned on when the power is connected. Panel "PHONE" key toquickly enter the Bluetooth interface;



2.4.2 Bluetooth pairing

The whole information of the Bluetooth interface, the mobile search auto-complete matching (the default passkey: 0000) Matching refers to the mutual recognition process of two Bluetooth devices for the first communication. After the first connection, the subsequent communication connection will automatically pair and not have to pair every time. (depending on mobile phones).





Press in Bluetooth pairing interface, it will get into the status of the Bluetooth search mode and this machine is searching for Bluetooth devices around, press again will automatically terminate the search state.

Choose the Bluetooth device name on the search results to match connection. It will automatically after the connection is successful jump to the matching list, and there will be a Bluetooth icon besides the successful connected Bluetooth devices

Note: The following operations are performed in the Bluetooth pairing success and connect under the conditions of operation.

2.4.3 Bluetooth Phone Book

In the Bluetooth interface, click to enter the Bluetooth Address book interface.

And follow the download the phone book





A list of dial-up operation when long names and numbers are used to scroll the display

Bluetooth Phone Book Interface

0000	Download the phone book Again after the download is complete, click the phone is the search function
3 D	Download Mobile phone SIM card phone book Again after the download is complete, click the phone is the search function
<u>*</u>	All download mobile phone book
	Delete all phone book imported

2.4.4 Phone

2.4.4.1 To achieve the dialing function via Bluetooth

In the Bluetooth interface, click to enter into the Bluetooth Dial interface.

- ①. Click numbers on the interface, if the input is wrong, click to delete
- ② .Click after entering phone number;
 Click to end up the call.
- ③.Are on a call, press the switch to the phone call, press Mute for MIC.



Bluetooth phone Dial Records Interface

4. Function keys on the panel are unavailable when in the call; the function keys return to normal after hang up.

2.4.4.2 To achieve the called function via Bluetooth

When the mobile When phone is connected with Bluetooth device and there is an incoming call, the interface is divided into two situations:

- ① .In the Bluetooth Application Interface
- (2) In other function interfaces





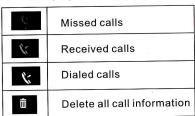
Note: Click the call is pickup the phone, and click means to hang up, the small window will automatically disappear.

2.4.5 Call Record

In the Bluetooth interface, click to enter into bluetooth call history interface.

Click for doing dial operation.

Remark: When the names and numbers are long, they would be displayed rollingly.





Call recording interface

2.4.6 Bluetooth Music

In the Bluetooth interface, click into Bluetooth Music Interface.

When connected with bluetooth mobile phone, it can operate play/pause/down music function.

Note: Some kind of mobile phones need to start playing music player for bluetooth music when using bluetooth music function.



Bluetooth Music Interface

2.4.7 The whole Bluetooth hardware settings

In Bluetooth interface, enter the Bluetooth settings screen.

Device name	The head unit name when searching on phone	
PIN password	Pair settings	
Auto connect	Automatic connection	
Auto answer	Automatic answer	
ń	Click to back to main menu.	
₽4	Click to go back to last interface.	
5	Back to matching the main interface	



2.5 3G Application

Applications> Settings

- > Wireless and Network
- > Mobile network
- > Access Points

2.5.1 Allow data roaming

Applications > Settings

- > Wireless and Network
- > Mobile network
- (1) Click data roaming, select OK.
- (2) .If the recognition is successful, the access would automatically identify the type of 3G device to populate the appropriate access automatically, as shown below:



Note: please confirm data roaming open, otherwise you cannot use the 3G function

2.5.2 Set the access point information

Use 3G, please 3G module connected to the USB interface, and available to confirm insert a 3G card.



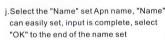
a.Enter the system main interface,



d. Select Mobile networks ", enter the mobile network settings of themain interface,



g. Set the Access Point Names ", enter the name of the network access point settings to the main interface.



K. Select "APN", enter "the Apn access name in the Chinese mainland of China Unicom's 3G the APN settings for: " 3gnet "in Hong Kong, Macao and Taiwan and foreign, should be consulted local 3G network supplier, enter the correspondingAPN value.



b. Select the "Settings" to enter the main interface.



e.First make sure the " Data roaming " is selected, if you have no choice, point the" Data roaming "pop-up prompt menu, select" Ok



h. Press the "Menu" button on the machine panel, pop-up menu option.





c. Select "Wireless networks". access to the network selection screen.



f. Results shown in Figure 7. Choose the successful:



I. Select "New APN" new "APN" into the "APN" to set the main interface.







panel, pop-up menu option.



I. Press the "Menu" button on the machine m. Select "Save" to save the settings content, and return to the main interface of Apn settings



n. When the following interface pops up, make sure that Step 1 is complete, press Home to return to the main interface, then repeat 1-15 steps:



o.In the Apn the main interface, select New APN network behind the circle, so that it is selected can.

p. Back to the main interface, the 3G network has opened, the search to the 3G signal, can use3G network.

2.6 Multimedia

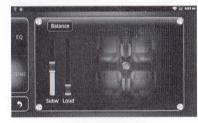
2.6.1 Equalizer

Applications > Equalizer

Click equalizer application icon into the equalizer interface. Or clickto enter into EQ Setup operation in all audio or video playing interface. Equalizer settings interface is divided into two functions: namely, equalizer and sound field settings function.



Equalizer settings interface



Balance Setup Interface

①.In the equalizer settings interface provides 8 kinds of audio playback mode choose: Note: In the Normal mode, users can customize effects model through the effect adjuster.

(2) In a field setting interface the user can freely adjust the bass and loudness of the contrast, the user can also on the front left, front right, left, right after the four angularly audio settings, as shown below: Balance Setup

Note: the subwoofer adjustment is only effective when it is linked to external 5.1 amp.

2.6.2 DVD Play

Insert the DVD disk the system will automatically enter the DVD interface and read the disk information automatically when a disk is detected and then start to play normally.



DVD Play Interface

Function details as below:

Icon	Button Name	Function Description
M	Play/Pause	When playing, click it to pause. When pause, click it to continue playing.
▶	Next Track	Click to play the next track or next chapter.
 	Last Track	Click to play the last track or next chapter
>>	Fast forward	Click to fast forward increasingly as by 2X / 4X / 8X / 20X DVS:Click to fast forward increasingly as by 2X / 4X / 8X / 16X / 32X
*	Fast Backward	Click to fast rewind increasingly as by 2X / 4X / 8X / 20X DVS:Click to fast rewind increasingly as by 2X / 4X / 8X / 16X / 32X
>	Extended function	Used to eject the expansion function
TITLE	Title	Click to show title (need disk support)
Ċ	Cycle Play Mode	Click to set up playback mode, DVD: Chapter cycle /heading cycle / full catalog circulation / cycle cancellation; VCD: single cycle / all cycle / cycle cancellation.
×	Random play mode	Options for ON and OFF, ON, switch on the next song, random play
40	Channel Switch	Click to switch in different languages and audiotracks (need disk support).
SUB.T	Subtitle	Click to switch subtitle display(need disk support)
EQ	EQ Setup	Click to enter into EQ setup interface.
谷	Main Interface	Click to back to main interface
5	Back	Click to back to the last interface.

2.6.3 CD Player

Insert a CD disc, the system will automatically enter the CD interface, when a disc is detected, it will automatically read the disc information and start normal play.



CD Play Interface

Function details as below:

lcon	Button Name	Function Description
M	Play/Pause	Click to play or pause.
>>	Next Track	At one time to play the next song, press down roll list for tracks
Ċ	Cycle Play Mode	Click to set up playback mode
×	Random playb mode	Click to set the random playback mode
H	Last Track	Click to play the last track or next chapter.
EQ	EQ Setup	Click to enter into EQ setup interface.
ŕ	Main Menu	Click to go back to main menu.
5	Back	Click to go back to the last interface.

2.6.4 iPod Play

Application> iPod

 ${\it Click}\ the\ iPod\ application\ icon\ to\ enter\ into\ the\ iPod\ play\ interface, just\ as\ shown\ below.$



iPod Play Interface

lcon	Button Name	Function Description
, N	Play/Pause	Click to play or pause.
₩	Next Track	Click to play the next track.
H	Last Track	Click one time to replay the current track; Click twice to play the last track.
>>	Fast Forward	Press to fast forward.
*	Fast Rewind	Press to fast rewind.
C	Cycle Play Mode	Click to set up play modes: sequential play,single cycle, the whole catalog circulation.
×	Random play mode	Click to start random play mode or cancel random play
Artists	Artist	Click to play the iPod's song in the form of an artist
Albums	Album	Click to display the iPod's song in the form of album.
Songs	Song	Click to display all the songs in the iPod.
Playlists	Play List	Click to display the listed songs in the iPod.

2.6.5 Audio Play

Audio player supports the following formats: mp3/aac/flac/wav/amr/m4a/ogg Application>Music

Click music application icon to enter into the music player interface, as shown below:



Artist Interface

lcon	Button Name	Function Description
M	Play/Pause	Click to play or pause.
₩	Next Track	Play the next track.
K	Last Track	Play the last track.
۵	Cycle Play Mode	Click to set up play mode: sequential play,single cycle, the whole catalog circulation.
×	Random play	Click to start or cancel random play.
Artists	Artist Click to play all the song as if to be performed by an	
Albums Album Click to displa		Click to display all the songs in the form of album.
Songs	Songs Click to display all the songs.	
Play List Click to display the most recently added song		Click to display the most recently added songs.

2.6.6 Video Playing

Supporting form of the video player: mp4/avi/wmv/3gp/flv/saf/mov/mkv/mpg

Application > Video

Press Video application icon to enter into video playin interface, take a photo for example.





The detail of the button function of video playing interface

lcon	Button Name	Function Description
H	Play/Pause	Press Pause when play / Press Play when pause
>>	Forwards Fast	Click to forwards fast
Backwards Fast Click		Click to backwards fast

2.6.7 Digital TV

Application > Digital TV

Click analog TV application icon into the digital TV interface

The details of digital TV function interface are as below.

Note:

Icon	Button Name	Function Description
谷	Menu	Click to back into menu
5	Back	Click to back into last content
EQ	EQ	Click to enter into EQ interface

For more details of description of the digital TV, please refer to the digital TV instruction.

2.6.8 Analog TV

Application > Analog TV

Click Analog TV Icon to enter into Analog TV playing interface, details as below.



Icon	Button Name	Function Description
ń	Main Menu	Click to back into menu
Q	Auto search Automatic search and save Switch to last channel	
4		
Next channel Switch to last channel		Switch to last channel
Search previous channel Click on the		Click on the search on previous channels
Search on the next channels The list Back		Click on the search on the next channels
		Search list
		Click to back into last content

2.7 AUX IN Function

To ensure after video source under the normal state when it works.

Application > AUX IN

Press screen to come out a hide menu, click to enter into EQ setting interface, it can adjust EQ effects, click to back into last content, click to back into system menu.

2.8 Rear View

Auto start reverse gear, such as with a mirror, the system switches to the rear-view mirror screen output automatically, audio output sound still; if not equipped with rear-view mirror, the system remains the same player

3 Firmware Upgrading

3.1 preparing for upgrade

1. Firstly, format your SD card for what you use to firmware upgrade

3.2. Update MCU

- 3.2.1 copy "318a2e70-44bf-11e1-b1cf-000c29ba27c0" to the root directory of SD card and Inserted into the machine SD card slot.
- 3.2.2 Start to update MCU(Settings->General->MCU update) , click OK



3.2.3Wait for the upgrade is completed. The system will automatically restart after the upgrade is completed, please don't Ignition or shut down during the upgrade process.



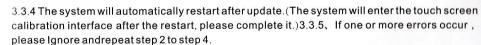
CIOFCUD

3.3 Update system

3.3.1.copy "u-boot-skip.bin, ulmage, uramdisk.img, system, img" to the root directory of SD card, and Inserted into the machine SD card slot.



3.3.3. Press and hold any panel buttons, and boot, the system will enter the upgrade interface automatically.



3.4. Update DVD

- 3.4.1 Burn "dvdrom.bin" to CD-ROM, and inserted into the machine dish mouth
- 3.4.2 Wait for the update is complete.
- 3.4.3 Eject the disc

4. Trouble handle

When your equipment met troubles, please check the problems as below.

Item	Problem	Solution	
1	Unable connect to the network	See 3G Card is installed correctly to make sure the correct and proper 3G terminal operator's SIM card weather launched 3G card data Mobile data roaming setting is connected or not. APN weather selected Whether 3G card arrears	
2	It can't to save and mention "MCC" must 3 letter.	Check the 3G card install right or not.	
3	Can't install applications.	①. Verify that the install application suffix is named "APK" ②. Enter into Setting to select unknown sources	
4	When the Bluetooth paired success, sometimes will be mentioned connect failed	①.Some cellphones with Android system may occur this problem at the first connection. Please just find the pairedn device in matching list and then connect them once more. ②. The unsuccessful connection is compatibility issues between cell phone and Bluetooth. If this occurs, please check the options in pair list of your cell phone. And you will find that the setting of Bluetooth Media and Mobile Media has been turned off. Turn on them and the connection will be successful.	
5	How to install applications	First, please copy the application files with suffix ".APK" to your SD or U disk. And the following are installation methods: 1. Click into the document management interface to find the SD card or U disk directory, and then select the ".APK" suffixed application file and click to install. 2. Find the Setting interface—>Applications—>install application 3. select the ".APK" suffixed application file and click to install.	
6	How to uninstall users APK application	Interface Setting—>Applications—>Installation Applications—>Uninstalltion Applications. To click the unistallation APK Applications	
7	Radio can't research channels	to check the radio antenna whether connected and have signal before use it.	
8	No voice	System is muted or not	

9	Media can't be recognized from SD card.	prohibit hot-swappable SD card
10	3G、WIFIcan' tbe recognized	prohibit hot-swappable 3G/WIFI
11	MUSIC, RADIO and third-party application mixes, can not turn off the MUSIC, RADIO	Long press panel Back to exit the system MUSIC RADIO mode, again into third-party applications can

5.Specification

Operating voltage: DC 12V Operating voltage range: 10.8V ~ 16V Maximum operating current: 10A Installation size: 167*178*100mm Installation angle: The front and rear inclination is less than 30° FM radio part Frequency range: 87.5-108MHz (Europe) 87.5-107.9MHz (America) 36 stations preset Sensitivity (-30dB):12dBu SNR (-50dB):15dBuV Frequency response range: 30Hz-15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 830-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Frequency response source: 60dB Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Frequency response: 50Hz ~ 2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-R, DVD+R, DVD-R, DVD+R, DVD-R, DVD-R, DVD-R, DVD-R, DV	J.Opc.			
Screen type: TFT Installation size: 167*178*100mm Installation angle: The front and rear inclination is less than 30° FM radio part Frequency range: 87.5-108MHz (Europe) 87.5-107.9MHz (America) 36 stations preset Sensitivity (-30dB): 12dBu SNR (-50dB): 15dBuV Frequency response range: 30Hz~15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz~2KHz (±3dB) DVD/CD play part Compatible dises and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3. WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Operating vol	tage: DC 12V	Display screen part	
Installation size: 167*178*100mm Installation angle: The front and rear inclination is less than 30° FM radio part Frequency range: 87.5-108MHz (Europe) 87.5-107.9MHz (America) 36 stations preset Sensitivity (-30dB):12dBu SNR (-50dB):15dBuV Frequency response range: 30Hz-15KHz (±3dB) AM radio part Frequency response range: 30Hz-15KHz (±3dB) AM radio part Frequency response range: 30Hz-25KHz (±3dB) AM radio part Frequency response range: 30Hz-25KHz (±3dB) AM radio part Frequency response: 50Hz ~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD-R, DVD-RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2 ~ 3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10-200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Operating voltage range: 10.8V ~ 16V		Screen dimension:7" / 6.2"	
Installation angle: The front and rear inclination is less than 30° FM radio part Frequency range: 87.5-108MHz (Europe) 87.5-107.9MHz (America) 36 stations preset Sensitivity (-30dB):12dBu SNR (-50dB):15dBuV Frequency response range: 30Hz-15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz -2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD-RR, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz -2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2-3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10-200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Maximum operating current: 10A		Screen type: TFT	
FM radio part Frequency range: 87.5-108MHz (Europe) 87.5-107.9MHz (America) 36 stations preset Sensitivity (-30dB):12dBu SNR (-50dB):15dBuV Frequency response range: 30Hz-15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz -2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA_SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz -2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2-3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10-200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Installationsi	ze: 167*178*100mm	Response time: Response = 30ms, fall = 5	0ms
Frequency range: 87.5-108MHz (Europe) 87.5-107.9MHz (America) 36 stations preset Sensitivity (-30dB):12dBu SNR (-50dB):15dBuV Frequency response range: 30Hz~15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz ~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2 ~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Installation a	ngle: The front and rear inclination is less than 30°	Pixel: 384,000 Pixels	
87.5-107.9MHz (America) 36 stations preset Sensitivity (-30dB):12dBu SNR (-50dB):15dBuV Frequency response range: 30Hz~15KHz (±3dB) AM radio part Frequency response range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3. WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2-3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10–200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	FM radio p	art	Angular field: Top view =65 ,bottom view =40 ,	
Sensitivity (-30dB):12dBu SNR (-50dB):15dBuV Frequency response range: 30Hz~15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3. WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Frequency ra	nge: 87.5-108MHz (Europe)	Left view =65°, Right view=65°	
SNR (-50dB):15dBuV Frequency response range: 30Hz-15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz - 2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz - 2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2-3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10-200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	87.5-107.9MI	Hz (America) 36 stations preset	Ambient temperature	
Frequency response range: 30Hz~15KHz (±3dB) AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2-3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10-200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm Operating humidity: 45%~80% (Relative humidity) Storage humidity: 45%~80% (Relative humidity) Package Contents Car PC 1 GPS antenna 1 Hemote control (optional) 1 Hetal fasteners and screws 1 iPod and USB cable 1 User manual 1 WiFl dongle 1 Power cable 1 User Manual 1 User Manual 1 User Manual 1	Sensitivity (-3	30dB):12dBu	Operating temperature:-20~+70℃	
AM radio part Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz ~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm Storage humidity: 30%~90% (Relative humidity) Package Contents Car PC 1 GPS antenna 1 Wemote control (optional) 1 User Manual 1 Wemote control (optional) 1 User manual 1 WiFl dongle 1 Power cable 1 User Manual 1 User Manual 1 User Manual 1	SNR (-50dB)	:15dBuV	Storage temperature: -30~ +80℃	
Frequency range: 522-1620KHz (Europe) 530-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz -2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz -2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2-3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10-200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Frequency re	sponse range: 30Hz~15KHz (±3dB)	Operating humidity: 45%~ 80% (Relative	humidity)
San-1710KHz (America) 18 stations preset Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz ~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA, SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	AM radio p	art	Storage humidity: 30%~90% (Relative hu	midity)
Sensitivity (SN=20dB): 20dBuV Mirror-image suppression: 60dB Frequency response: 50Hz ~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA,SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Frequency range: 522-1620KHz (Europe)		Package Contents	
Mirror-image suppression: 60dB Frequency response: 50Hz ~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WMA,SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	530-1710KH	z (America) 18 stations preset	CarPC	1
Frequency response: 50Hz ~2KHz (±3dB) DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WIFI dongle Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm Metal fasteners and screws 1 iPod and USB cable User manual WIFI dongle Power cable Magnetic Digital TV antenna (optional) 1 User Manual 1 User Manual 1 User Ma	Sensitivity (S	N=20dB): 20dBuV	GPS antenna	1
DVD/CD play part Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WIFI dongle WMA,SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Mirror-image	suppression: 60dB	Remote control (optional)	1
Compatible discs and format: DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WIFI dongle WMA,SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Frequency response: 50Hz ~2KHz (±3dB)		Metal fasteners and screws	1
DVD-R, DVD-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3, WIFI dongle 1 Audio SNR: 85dBA	DVD/CD pl	ay part	iPod and USB cable	1
WMA,SVCD, VCD, MPEG, JPEG Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Compatible	liscs and format:	Usermanual	1
Audio SNR: 85dBA Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	DVD-R, DVD	-RW, DVD+R, DVD+RW, CD-R, CD-RW, CD-DA, MP3,	WIFIdongle	1
Dynamic range: 95dB Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	WMA,SVCD,	VCD, MPEG, JPEG	Powercable	1
Frequency response: 50Hz ~2KHz (±3dB) Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Audio SNR: 8	5dBA	Magnetic Digital TV antenna (optional)	1
Digital audio sampling: 24bit Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Dynamic ran	ge: 95dB	User Manual	1
Electronic shock protection (ESP): DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Frequency re	esponse:50Hz ~2KHz (±3dB)		
DVD 2~3 seconds CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Digital audio	sampling: 24bit		
CD-DA 10s MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	Electronicsh	ock protection (ESP):		
MP3 100s WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	DVD	2~3 seconds		
WMA 200s Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	CD-DA	10s		
Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G Power output: 4*45W, impedance 4 Ohm	MP3	100s		
Power output: 4*45W, impedance 4 Ohm	WMA	200s		
	Mechanical shock protection: 10~200Hz, X/Y/Z:1.0G			
SRN: 70dB	Power output: 4*45W, impedance 4 Ohm			
	SRN: 70dB			