

# **Automotive navigation systems**

## **User's Manual for Android 4.4**

**Please read the manual carefully before installation**

**English**

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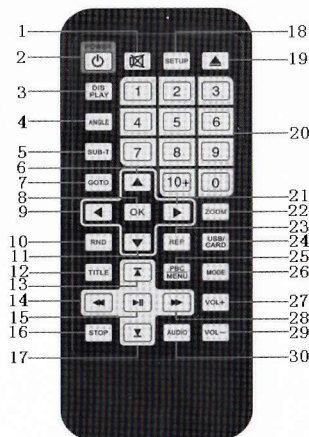
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## Standard accessories

- 1、Power cord
- 2、Remote control and batteries
- 3、Navigation antenna
- 4、User's Manual
- 5、Mounting bracket (not required for special machine)


### Buttons of remote control under DVD:

- 1、MUTE: Unmute by pressing the mute button again or press the volume +.
- 2、STANDBY: Press this button and the machine will be converted to standby mode.
- 3、DISPLAY: Press this button to display the disc playback time as well as the remaining time.
- 4、ANGLE: Press this button and you're allowed to watch the DVD content (disc supported) from different camera angles.
- 5、SUBTITLES: Press this button to switch discs subtitles (disc support is required).
- 6、CURSOR UP
- 7、GOTO: You may select to playback a certain chapter manually for the DVD disc with chapters.
- 8、OK: Confirm the current operations.
- 9、CURSOR LEFT
- 10、Shuffle Playback: Press this button and you may set the shuffle play state on/off.
- 11、CURSOR DOWN
- 12、TITLE: Press this button and return to the disc title menu.
- 13、PREV: Press this button during playback to choose to play the previous song or chapter.
- 14、REW: Press this button during playback of DVD to rewind the play content, and press the speed each time for increment. The speed will be different based on the disc file types.
- 15、PAUSE/PLAY.
- 16、STOP: Press this button during playback to stop the play.
- 17、NEXT: Press this button during playback to choose to play the next song or chapter.
- 18、SET: Press this button under the DVD features and enter DVD setup menu.
- 19、EJECT: Press this button to allow the ejecting/entering of CD.
- 20、NUMERIC: Press the corresponding button under DVD mode and select a song corresponded to the pressed figure for play.
- 21、CURSOR RIGHT
- 22、ZOOM: Press this key when playing a video to zoom in or zoom out the screen.





- 23、REPEAT: Press this key to select the CD content (single or all) for repeated or sequential playback.
- 24、Press to enter the music player feature .
- 25、MENU: Press this button to return to the CD directory menu based on the types of disc, or set to turn on or off the PBC.
- 26、MODE: press this button and the conversions among DVD, music, video, AVIN and radio are performed.
- 27、VOL +: Press this button to increase the volume.
- 28、FFWD: Press this button during DVD playback to fast forward the play content, press the speed each time for increment; the speed will be different based on the disc file types.
- 29、VOL -: Press this button to decrease the volume.
- 30、LANGUAGE: Press this button under DVD and VCD states to allow the language switching and channel switching, respectively.

### Quick guide for touch operation

- In the main interface, you may touch the icon  to view all applications; click on the icon of any application and keep about 3 seconds, then you can drag the application icon to the main screen interface.



- No matter which interfaces is displayed on the screen, you're allowed to click the  button at the top left corner of the screen and return to the main interface.

- When operating, click on the  button located at top right corner of the touch screen, and then you may return to the previous screen interface.




- Press and hold to drag the desktop icon to the left, you can see other desktop icon.



### Desktop widget set

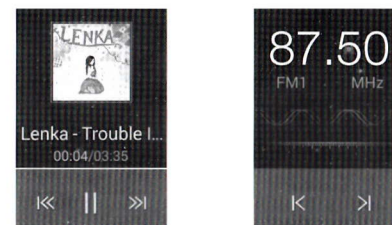


- Go to Settings, turn on wifi function and connected to the network (open web browser, make sure the network connection is normal).

- Click the  button, find the "Weather" icon in the application and open, click on the top right corner of the screen to add the key "+" in the search field, enter the name of your city, click on the "Search" to find your city. After selecting the following figure:



Desktop clock widget will become the music player after playing the music and pressing the Home key to return to the home page; press the Home key to return home in the radio interface, and the clock widget will become the radio controller, allowing for channel selections.



### Settings

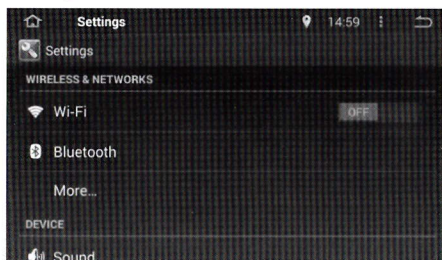
- Wi-Fi**

**WiFi connection:** Click the SET button and enter the wi-fi setup; drag the "OFF" button to turn on the wireless network, and all available wireless networks will then appear, then click your wireless network for connection. In case the wireless network

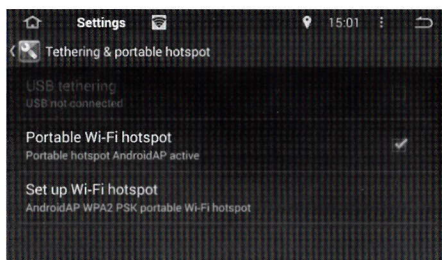


requires no password, click on the "Connect" and begin to connect; if the wireless network requires a password, please enter a password first, and then click "Connect" to start the connection. If the wireless network has been successfully connected before, the information will then be stored and will automatically connect. After the successful connection of machine, the status bar at the top of screen will show a wireless network icon.

**3G network connection:** Plug USB-3G device, open wifi and access to the internet via 3G network after appearing of wifi icon on the main interface after waiting for 15sec.

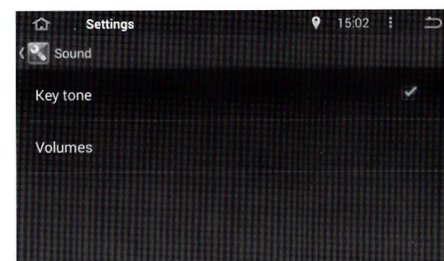


**Portable hotspot:** When 3G network connection is OK, open the "Portable Wi-Fi Hotspot" and you can set the network SSID, security and password in "Set Wi-Fi hotspots", and save it after setting completion. Other wireless devices also can connect to the network via machine's Wi-Fi hotspots at this time.



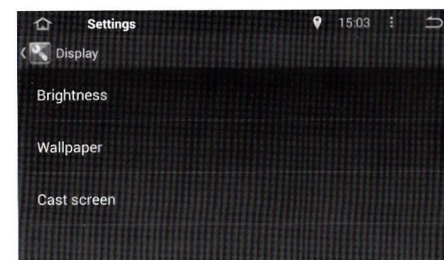
## ● Sound

For volume adjustment, you can also use tick to select or cancel the keypad tones.



## ● Display

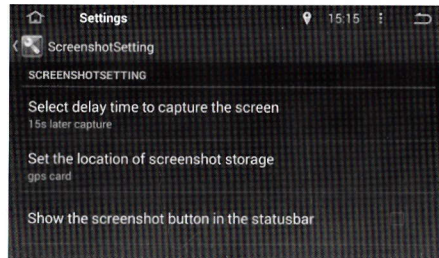
LCD brightness, wallpaper, wireless display.



**Operating steps by Cast screen:** When your phone has been designed with wireless display features, you shall a) first start the machine's wi-fi and then the Cast screen; b) start the phone's wifi function and then the wireless display. When machine and phone are prompted with available devices (if there's no display device among available devices, you can click on "Search Display Device"), and click on the device displayed on the phone for connection.

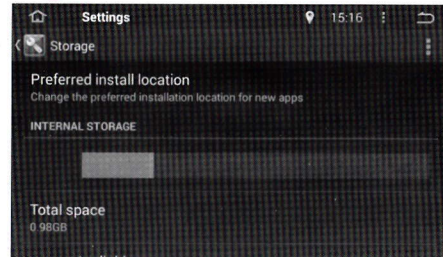
## ● Screenshotsset

Set the screenshot image storage location, select the delay time to capture the screen, then switch to the desired captured interface, and the image will then be automatically captured after the end of the countdown time.



## ● Storage

To see the available storage space, you may clear the memory card (formatting the internal memory), and select the option of media scan to an external memory card or an external USB device.

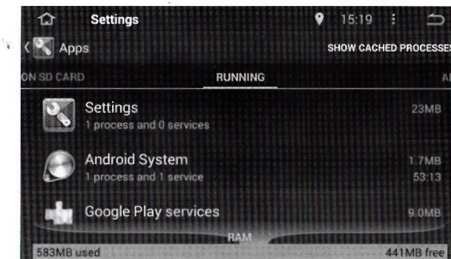


### [Notes]:

1. "Preferred install location" can be set either on a SD card or inside the device memory just based on your software installed.
2. If you want to remove TF card or USB flash drive, click on the option "Uninstall TF card" and confirm your selection, then you're allowed to remove the TF card / USB host device in a safe manner.

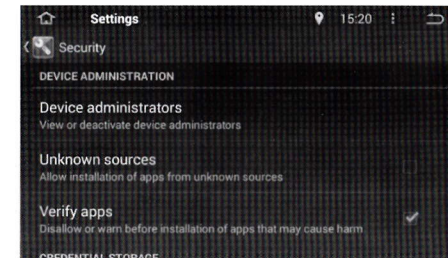
## ● Application

Management of applications. Click the catalog (already downloaded, SD card, under running or all), and select the application you want to uninstall, you will then enter the following interface, click "Uninstall", and then you can remove the application from the system.



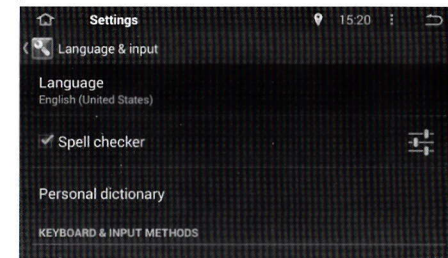
## ● Security

Display the password, device manager, unknown source, trust certificates, and installation from SD card.



## ● Language & input method

Allowing for language selection, text input and auto-error correction options. Select your favorite keyboard and input method, and set the text-to-language output, pointer speed.



## ● Backup & Reset

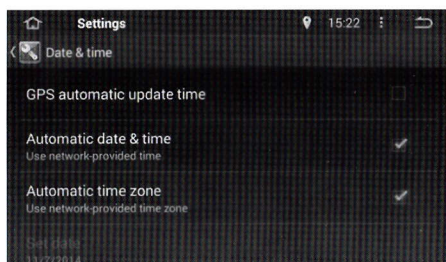
Allowing for data backup or reset, and the factory settings restore



**Warning: Once you perform a "restore factory settings", it will erase all personal data on the machine, so you are required to make backup to all your personal data before executing this function.**

- **Date & time**

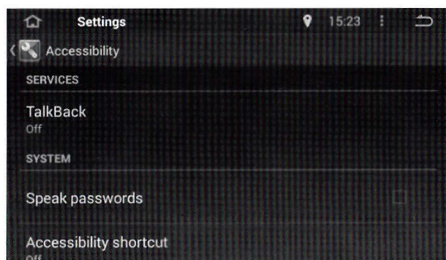
You may use the GPS to automatically update the time or just use the time or time zone provided by the networks; manually set the date and time, select the time zone; you can also choose the display format of the time and date.



- **Auxiliary functions**

Intercom system offers voice feedback to assist with the blind and visually impaired users. You need to download the application from the Android app store.

Here you can also set the system and select the options such as voice password, touch screen latency and installation of webpage scripts.



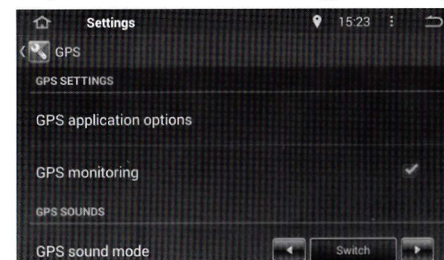
- **GPS**

GPS Application Selection: Select the navigation software you intend to use.

GPS listening, GPS status, location information access permission.

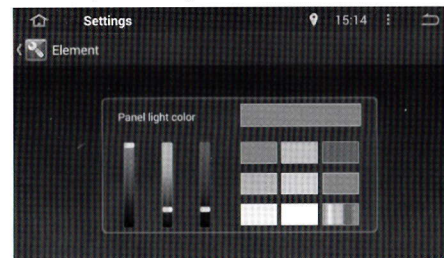
GPS sound mode selection: "Switch" and "Mix" option.

GPS mix ratio: adjust the mix ratio of the size, you can map the voice increases.



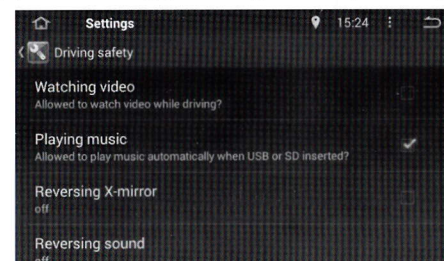
- **Element settings**

Panel buttons light colors are available, with nine kinds of color modes optional. Can also customize any color adjustment.



- **Driving settings**

Video settings, media settings, reversing X-mirror, reversing sound



- **Amplifier settings**

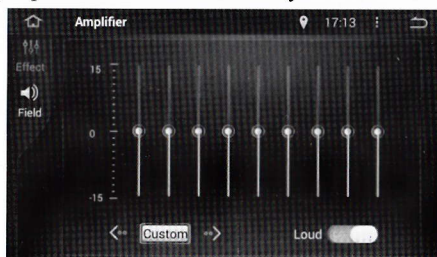
Loudness switch: When you open the audio low frequency boost.

Sound settings: Settings of treble, middle, bass, loudness, mega bass outputs are allowed.

Sound effect may be preset as jazz, pop, rock, classical, straight, vocal or user mode.

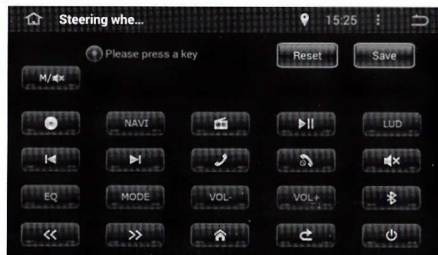
Sound field selectable front left, front right, rear left, rear right speaker single sound.

[Note]: The changed parameters are automatically saved in the "User" mode.



- **Learning of steering wheel**

Click the button on the screen first, e.g. VOL-, "Please press the button" on the top left of the screen becomes "[V-]" and start learning at this time!" And press the VOL- button on the original vehicle button, then click the SAVE button at the top right corner of the screen for saving. Press those buttons on the steering wheel, you can then able to control a host. Repeat the same steps for other buttons.



[Note]: If the settings are incorrect, click the RESET button to clear the learn key functions, and start to re-learn.

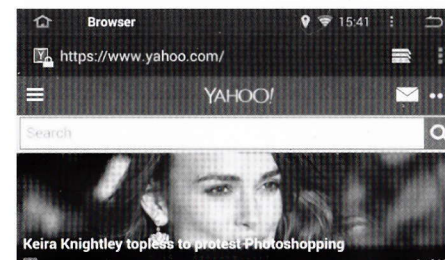
## Application installation

You may download the application from the Android app store, and then install it online, or install applications from your TF card or USB device. The installation can be done by only clicking the application, and you can run the application immediately after installation. You may also install the application you want with "APK installer."

## Introductions to common applications

- **Browser**

After the machine is connected with the wireless network, click on the **Browser** icon on the desktop and you can open your web browser



Then you're allowed to browse the webpage. You can get more options by

clicking the menu icon  on the top right of the screen:

**Refresh:** Refresh the web page

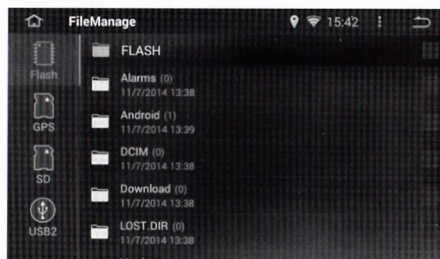
**Bookmark:** View bookmarks, websites you browsed the most frequently as well as the browsing history

**Others:** More options, such as "Save to bookmarks", "Share webpage", "Search on the web", "Request desktop website", "No sleep when browsing", "Save for offline reading", "Settings".



## ● File Manager

Click the **File Manager** icon to browse the files saved in the storage device (Flash, SD card or USB drive). You may also view the file in a classified manner.



Click on the appropriate storage device (Flash, SD, GPS or USB drive) to view the files inside. Select a file or folder (file or folder after tick), then copy the key and paste the key, cut keys, between each storage device can copy, move, paste files or folders. By delete key can delete a file or folder.

How to copy a file: Select the file or folder (file or folder after tick), click on the Copy button, then open your storage device to be stored (Flash, SD, GPS or USB) or folder, click on the Paste button can be copy your files into that folder.

## Function introduction

### ● Radio function operation



: Automatic station search, which can be stopped when click it again.

: Press this button to switch to the stereo and mono.

: Conversion between Remote and Proximity

**AM** : AM radio

**FM** : FM radio

**AF** : Press this button when the RDS is started to open or close the replace substitute frequency function. If the current radio station has a frequency table, it will automatically jump to frequency with good signal when the original signal is weak.

**TA** : Press this button when the RDS is started to automatically search traffic bulletin information. If there's traffic bulletin information provided currently, it will automatically skip to the radio station for playback.

**PTY** : Press this button to set the type of program you want to listen, an automatic search will be performed after selection.




: Semi-automatic station search up short press; long press the up tuning frequency.

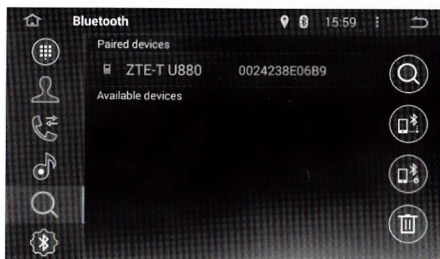
: Press down semi-automatic station search; long press trimming down frequency.



### Special operation tips:



- 1、 Drag to the left column to store the radio, you can view the search to other stations.
- 2、 If there is no radio station stored you want, you may manually tune to the frequency point you desired and hold down the radio station stored, and then you can save the desired station in such point.



## ● Bluetooth operation

After entering the Bluetooth interface, click on the search button  to search for Bluetooth devices of your phone ( Bluetooth mobile phone settings "detectability" To open ); after selecting your Bluetooth device on your phone, click the  button for pairing connection. Bluetooth connection can be disconnected by clicking the  button.







: Dial pad. Click the  button during a call to convert the other person's voice from the speaker to the phone, or from the phone to the speaker.


: Phone book. After entering the phone book, you need to click the  button at the right of the screen to download contacts and phone numbers.

: Call history. Select a record in the call history and then click the  button to delete such record.


: connection settings

: Click this button to switch to Bluetooth music interface.

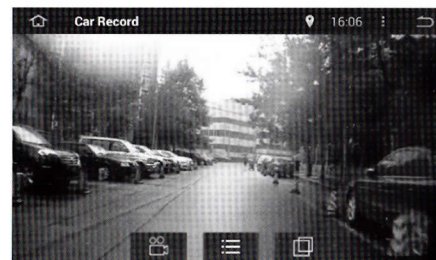
After the Bluetooth of mobile phone is connected to the machine, click on the  icon and enter the Bluetooth music playback; click the icons ,  and  for PREV/NEXT, PLAY/PASUE.


: You can change the Bluetooth device name, pin cord, auto answer and auto-connection.


## Special operation tips:


- 1、 Press the  to delete a number when dialing the numeric keys.
- 2、 Phone numbers within the call history area can be slide up and down and page up and down by touching the screen.
- 3、 Automatic paring with the phone is defaulted. When the system displays the successful pairing is done, the phone starts to connect with the connection password of "0000", and the Bluetooth function is available when the system prompts the successful connection (Bluetooth symbol in the upper right corner of the screen changes from gray to white). (Note: For detailed operation of phones, please refer to the operating instructions section of the Bluetooth in such mobile phone)

## ● Car record operation



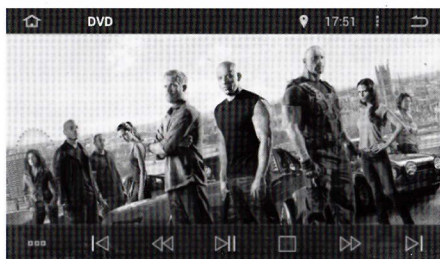
: Start recording. Background operation can be carried out after the starting of the recording, and the recording will be automatically saved after stopping the video recording.


: List of recorded videos. The left space of playback and video recording interface will show the time, longitude, latitude and driving speed.


: Switching of videos between multiple cameras


**[Note]:** As the videos recorded by the driving recorder is stored in the map card and the video files are large, it is recommended to use the map card above 8GB, so the driving video time automatically saved will be longer.


#### ● Operation of DVD videos





: Press this button to switch to the other function keys.


: PREV, Press this button during playback and you will then choose to play the previous song or chapter.


: REW, Press this button during playback to fast rewind the play content, press the speed each time for increment; the speed will be different based on the disc file types.

: Play/pause, Press this button during playback to convert between the play / pause functions.

: Press this button during film playback to stop playback.


: FFWD, Press this button during playback to fast forward the play content, press the speed each time for increment; the speed will be different based on the disc file types.


: NEXT, Press this button during playback and choose to play the next song or the next chapter.


: Conversion key of sound effects

: Subtitles: Press this button to switch discs subtitles (disc support is required).

: Channel switching

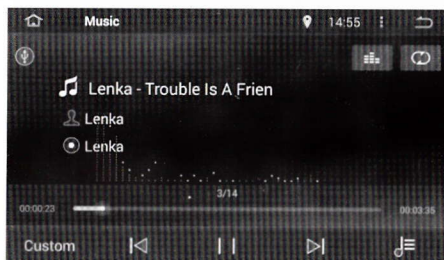
: Press this button to return to the disc contents menu

: Press to allow the random play, single repeat, recycled playback and orderly play.

: Click once to callout the arrow key, and click again to callout the numeric keys.



## ● Music playback operation



**Custom**: Conversion key of sound effects

**⏮**: PREV, Press this button during playback and you will then choose to play the previous song.

**⏸**: Play/pause, Press this button during playback to convert between the play / pause functions.

**⏭**: NEXT, Press this button during playback and choose to play the next song.

**📑**: Add music in the play list.

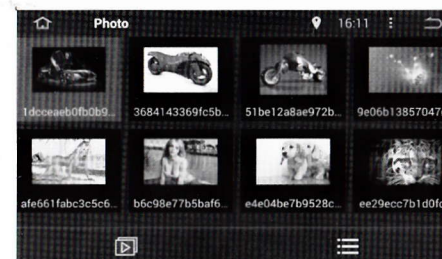
**📊**: Audio Wave/lyrics/Artist information conversion.

**🔄**: Press this button to select the random play, single repeat, recycled playback and orderly play of music in SD / USB.

### Special operation tips:

1. Press and hold the screen to drag to the left, brings up the playlist.
2. Press and hold the screen to the right to add music brings up a list.

## ● Picture play operation



**🖼**: Slideshow.

**☰**: Add pictures from SD/USB.


## ● IPOD operation




**Custom**: Conversion key of sound effects

**⏮**: PREV, Press this button during playback and you will then choose to play the previous song.

**⏸**: Play/pause, Press this button during playback to convert between the play / pause functions.

: NEXT, Press this button during playback and choose to play the next song.

: Press this button to add more music.

: Conversion key for playback mode

### Special operation tips:

When the IPOD is connected and the interface will automatically transferred to the play interface; click on the function icon in the interface at this time, and the IPOD connection is deemed to be successful if the relevant content can be called out.

### Troubleshooting

Phenomenon sometimes considered to be the fault is arising from minor operation or wiring errors. Please check as per the following table before requesting repair.

#### 1. Power failure

Cause: The fuse has blown

Solution: Confirm whether the wire short circuited; replace the fuse with the same rating.

#### 2. Unable to operate after pressing the button

Cause: Failure of microprocessor chips within the device

Solution: Press the reset button on the device

#### 3. No TV / video image display

Cause: The device is not connected with the parking brake detection switch; the parking brake is not properly stopped

Solution: Connect according to connection diagram. For safety reasons, no TV / video images will be displayed during driving. The image will appear after the proper braking.

#### 4. Dark screen

Cause: Machine is located at a place with lower temperature

Solution: When you power on for the first time, the screen will be dark if the temperature of the display drop due to the characteristics of the LCD screen. After power on for a moment, the brightness will be normal after the temperature rise.

#### 5. Poor AM / FM radio reception or with noise

Cause: TV antenna and the car radio antenna is too close

Solution: The two antennas shall be placed as far as possible

#### 6. Remote control does not work

Cause: The remote control is failed to aim the remote sensor receiver / remote control battery is exhausted

Solution: Aim the remote control to the receiver window / replace with new batteries of the same model.

#### 7. No sound or with little voice

Cause: Loudness switch is not turned on or the mute is not turned off /music balance is set to one side

Input / out put wires or wiring harness are connected incorrectly

Solution: Turn on the loudness switch or turn off mute / adjust the balance.

Refer to the connection diagram as well as the detailed connection diagram of wire harness for correct connection

#### 8. Poor tune quality

Cause: Speaker wires is being pressed by the screws located at both sides of the car / speaker wires is being shared

Solution: Check the speaker wire/connect the out put terminals of the speaker

#### 9. When the ignition switch is in the OFF, storage content is erased

Cause: Battery wire/ignition is connected incorrectly; wrong connection of battery cables

Solution: Make correct connection based on the detailed connection diagram of wire harness

#### 10. Poor radio reception quality

Cause: The car antenna is not extended/no connection to the power supply wire of antenna

Solution: Stretch the antenna/make correct connection based on the detailed connection diagram of wire harness

#### 11. Out of tone

Cause: CD is damaged or dirty

Solution: Replace the DC or clear the dirty

## 12. VCD menu cannot play

Cause: Playing a VCD other than that attached with playback control

Solution: VCD other than that attached with playback control cannot be played in the menu mode.

## 13. No subtitles appeared

Cause: Playing a DVD disc without subtitles

Solution: No subtitles appeared for the DVD disc that has no subtitles.

## 14. Not the audio or subtitle language initially set

Cause: Playing the subtitle language of audio language that is not stored in the selection menu in the DVD disc

Solution: Replace the DVD disc with the audio and subtitle language that has been stored into the selection menu.

## Technical parameters

Specifications are subject to change without notice.

### DVD

D/A: 24 bit

PCM/Dolby digital/dats/MP3/WMA

Decoder: Linear PCM/Dolby digital/dats/MP3/WMA

Shake degree: Below measurable limit

Frequency response: (Sampling frequency: 96K) -20-44KHz

(Sampling frequency: 48K) -20 - 22KHz

(Sampling frequency: 41.4K) -20 - 22KHz

Total harmonic distortion (1K): less than 0.10%

SNR: 100dB (DVD96K)

Dynamic range: 100dB (DVD96K)

Disc formats: DVD Video / Video CD / CD DA

Quantitative bit number: 16/20/24 bits

### TV tuner

Receiving system: PAL B/G, I, DK, NTSC M / N, SECAM B / G, DK

Frequency synthesis: phase locked loop

TV reception: Off-air channels full band cable

Number of stations allowing for storage: 99

Sampling frequency: 44.1kHz/48kHz/96kHz

### FM tuner

Usable sensitivity (S / N = 30 dB): 10 dBu

Frequency response ( $\pm 3.0$ dB): 100Hz-10KHz

SNR (dB) (MONO): 55dB (STEREO): 45dB

Channel separation: greater than 24dB (75kHz, 98.1MHz)

Number of stations allowing for storage: 18

### AM tuner

Usable sensitivity (S / N = 20dB): 25dBu

Number of stations allowing for storage: 12

### Images

External video input color system: NTSC / PAL / SECAM

External video input level (RCA jacks): 1V<sub>p-p</sub>/75 $\Omega$

External audio input level (RCA jacks): 1V/22k

Audio output (analog audio): 2.0V (rms)

Video output: 1.0V (P-P), 75 $\Omega$

### Audio

Maximum power (front & rear): 45W  $\times$  4

Full Bandwidth Power (Front & Rear): (THD1% or less) 18W  $\times$  4

Preoutput level number (v): 2V/10k $\Omega$

Pre-output impedance:  $\leq 600\Omega$

### Monitor

Screen Size: 6.2 inches / 6.95 inches / 7 inches / 8 inches

Display system: TFT LCD panel

Pixel arrangement: RGB stripe

Effective pixels: 99.9%

Background lighting: LED

### Tone

Bass: 100Hz  $\pm$  10dB

Treble: 10kHz  $\pm$  10dB



## The system

Operating voltage: 14.4v (11v-16v)

Maximum current consumption: 15A

Size: 2DIN

Operating temperature range: -10 °C to 60 °C

Storage temperature range: -20 °C to 85 °C

Weight: 3kg

**Note:** FM / AM tuner's frequency ranges are as follows:

China: FM 87.5 MHz ~ 108.0MHz (100 kHz stepping)

AM 522 kHz ~ 1620 KHz (9 kHz stepping)

Europe: FM 87.5 MHz ~ 108.0MHz (50 kHz stepping)

AM 522 kHz ~ 1620 KHz (9 kHz stepping)

Eastern Europe: FM 65.0MHz ~ 74.0MHz (50 kHz stepping)

AM 522 kHz ~ 1620 KHz (9 kHz stepping)

Russia: FM 65 MHz ~ 74.0MHz, 88.0 MHz ~ 108.0MHz (30 kHz stepping)

AM 522 kHz ~ 1620 KHz (9 kHz stepping)

Americas 1: FM 87.5 MHz ~ 108.0 MHz (100 kHz stepping)

AM 530 KHz ~ 1710KHz (10 kHz stepping)

America 2: FM 87.5 MHz ~ 107.9 MHz (100 kHz stepping)

AM 530 KHz ~ 1710KHz (10 kHz stepping)

Japan: FM 76.0 MHz ~ 90.0MHz (100 kHz stepping)

AM 522 kHz ~ 1629 KHz (9 kHz stepping)

Aust: FM 87.5 MHz ~ 108.0 MHz (100 kHz stepping)

AM 522 KHz ~ 1710KHz (10 kHz stepping)

## Notes:

The company will continue to upgrade or update product function. In case there're differences between the actual operation and user's manual, no prior notice will be made. The actual function of the machine shall prevail, thank you!

# Connection diagram of power cord and AV cables

