



# M9970

CD/DVD/MP3/USB/BLUETOOTH PLAYER  
WITH FM/AM TUNER AND 7" TFT MONITOR

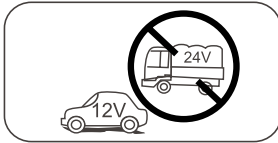
## Installation and Operating Instructions

## Safety Precautions

Thank you for purchasing this product. Please read through these operating instructions so you will know how to operate your model properly. Please keep this manual in a safe place for future reference.

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Only connect the unit to a 12-volt power supply with negative grounding.



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Never install this unit where operating it may impair safe driving conditions.



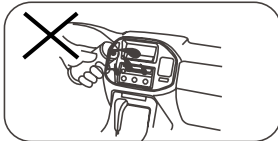
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Never use the front video display function when driving, so as to prevent violating traffic regulations or causing an accident.

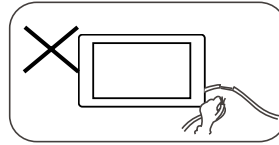


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Never expose this unit, amplifier or speakers to moisture or water to prevent electric sparks or fire.

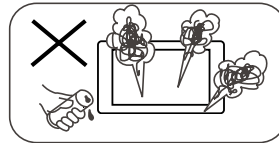


Do not change the fuse on the power cord without professional guidance. Using an improper fuse may cause damage to this unit or even cause fire.



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Please contact your nearest dealer if one of the following is experienced:



- (a). Water or other objects enter the unit.
- (b). There is smoke.
- (c). Peculiar smell.

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To ensure safe driving, please adjust the volume to a safe and comfortable level in case of emergency situations.

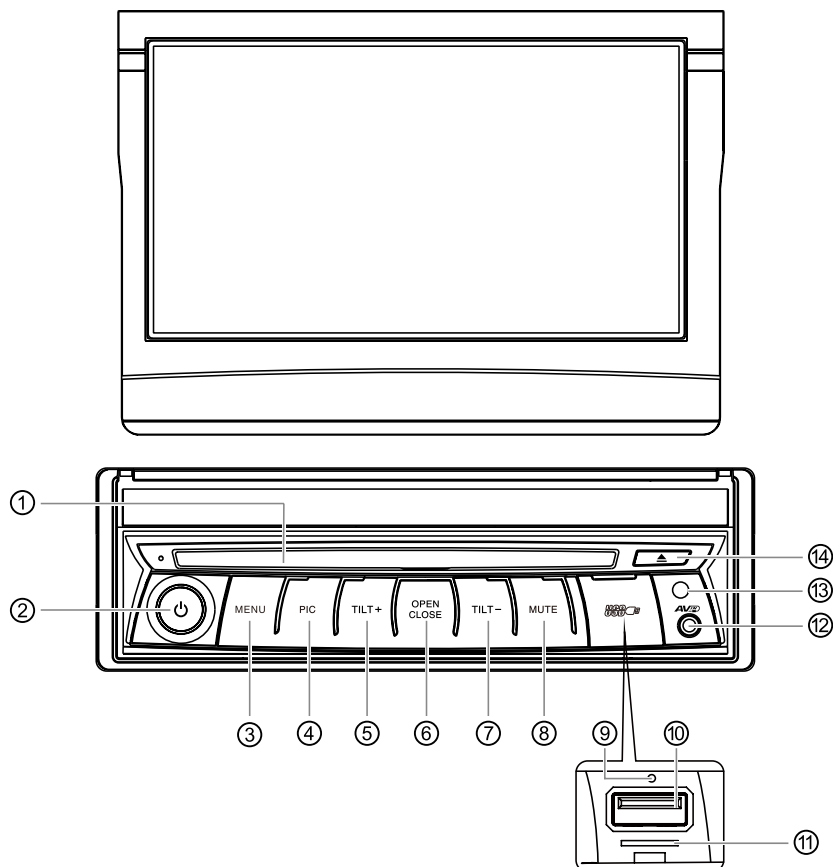
## Safety Precautions

1. Never disassemble or adjust the unit without professional guidance.  
For further details, please consult an authorized service provider or dealer.
2. If the front panel or TFT monitor is dirty, please use a clean silicone cloth and neutral detergent to clean. Using a rough cloth and non-neutral detergent such as alcohol to clean may scratch or discolor the monitor.
3. If the unit does not function normally, please refer to the troubleshooting guide of this manual. If no relevant information is found, please press the [RESET] key on the front panel to resume factory default.
4. If you have parked the car in hot or cold weather for a long time, please wait until the temperature in the car becomes normal before operating the unit.
5. Using the car heater in a low temperature environment may result in moisture collecting inside the unit. DO NOT use the unit in this condition. Eject the disc and wipe off the moisture on the disc. If the unit does not work after a few hours, please contact the service center.
6. Do not drop or bang the LCD monitor as this will damage it.
7. To prevent damage to the screen, avoid touching it with sharp objects.
8. Graphic illustrations are used to provide a clear demonstration and an easy way to understand how to operate this unit.
9. Only operate the unit as described in this manual. Inappropriate operation will void the guarantee.

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## Front Panel



### 1. Disc slot

### 2. [ ] Knob

Rotate to adjust the volume.  
Press to turn the unit ON or OFF.

### 3. [MENU] Key

Press to switch between the main menu and current source.

### 4. [PIC] Key

Press [PIC] repeatedly to adjust screen brightness.  
Press and hold [PIC] to turn off the display.

### 5. [TILT+] Knob

Increase the display angle

### 6. [OPEN/CLOSE] Key

Open / Close the TFT monitor

### 7. [TILT-] Knob

Decrease the display angle

### 8. [MUTE] Key

Press briefly to activate the MUTE function.  
Press again to resume normal sound.

### 9. Reset

Load the original settings.

### 10. USB connector

Connect an USB device for playback of music/video/picture files.

### 11. No Function

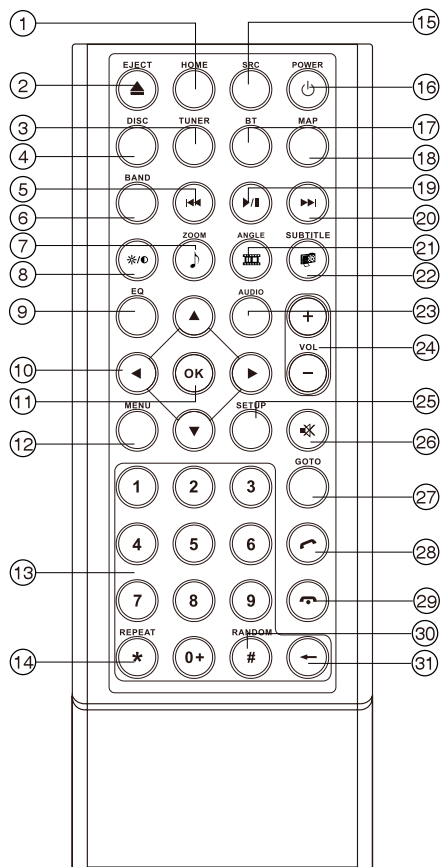
### 12. AV IN

### 13. Remote sensor

### 14. [ ] Key

Eject disc

## Remote Control



1. Return to the home menu
2. Eject the disc
3. Access to tuner source
4. Access to disc source
5. - Search an available radio station by decreasing tuning frequency  
- Select the previous chapter/track for playback
6. Select radio band
7. - Zoom in (Picture menu)  
- Access to music list (Audio menu of music playing)
8. Adjust screen settings
9. Open EQ menu
10. Menu cursor
11. Enter
12. - Open route menu (DVD)  
- Turns on/off PBC (VCD)
13. Digit area
14. Repeat playback
15. Change to next source
16. Power on/off
17. Access to Bluetooth source
18. Access to navigation source
19. Pause playback/Start playback
20. - Search an available radio station by increasing tuning frequency  
- Select the next chapter/track for playback
21. - Playback disc in different angle for a scene (DVD)  
- Rotate (photo playing)  
- Access to video list
22. - Language selection for subtitle (DVD)  
- Access to photo list
23. Change the audio language for disc playback (DVD)
24. Increase/Decrease volume
25. Access to settings source
26. Mute on/ off audio output
27. Activate direct access mode
28. Dial/Receive a call
29. Hang up
30. Play all chapter/tracks in random order
31. - Press to clear the number one by one  
- Hold to clear all the numbers

### Note:

Your remote control may differ slightly from the one pictured here. The above diagram is for illustrative purpose only.

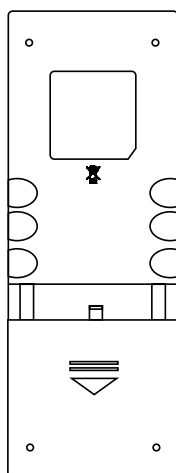
## Before Using

### Notes on Remote Control Usage

1. Aim the remote control at the remote sensor on the unit.
2. Replace the battery from the remote control or insert a battery insulator if the battery has not been used for a month or longer.
3. DO NOT store the remote control in direct sunlight or in a high temperature environment, as it may not function properly.
4. The battery can last up to for 6 months in normal conditions. If the remote control does not work, please change the battery.
5. Use "button shaped" lithium battery "CR2025" (3V) only.
6. DO NOT recharge, disassemble, heat or expose the battery to fire.
7. Insert the battery in the proper direction according to the ( + ) and ( - ) poles.
8. Store the battery in a place where it cannot be reached by children to avoid the risk of accident.

### Uninstall Battery

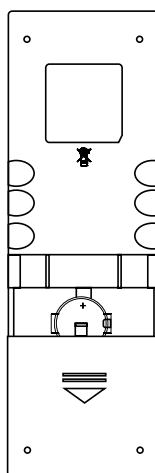
Slide out the battery compartment tray at the bottom on the back of the remote control.



↓ PULL OUT

### Install Battery

Use button-shaped lithium battery "CR2025 (3V)" only. Insert the battery in the battery tray in the proper direction according to the ( + ) and ( - ) poles.




PUSH IN ↑


# Basic Operations

## Parking Brake Inhibit


- When the "BRAKE" cable is connected to the brake switch, the video playback will be controlled by driving status, system setup and input video sources.
- Parking brake function is overridden when the video source is set to REVERSE.
- When the car is moving ahead, if video is played, WARNING will appear on the screen and then it will go blank. The warning screen will prevent the driver watching images. The passengers in the rear seats can watch normally.

## Power On / Off

Press the [  ] knob on the unit (or the [ POWER ] button on the remote control) to turn the unit on. The buttons on the front of the unit light up for a moment and the last working mode appears on the screen.

Press the [  ] knob again to turn off the unit.

## Mute

Press the [ MUTE ] button on the front panel or the [  ] button on the remote control to mute the volume from the unit. Press again to restore the volume. Adjusting the volume or using any of the audio setup features cancels the mute function.

## Audible Beep Confirmation

An audible beep tone confirms each function selection. The Beep tone can be disabled through the Setup menu.


## Playing Source Selection

Press the [ MENU ] button on the front panel or the [ SRC ] button on the remote control to display the playing source menu.

1. <<< or >>>: Touch to view the previous or next page of playing sources.
2. Playing source icon: Touch to access corresponding work mode.
3. Clock/Date
4. EQ: Touch to access Equalizer level settings menu.



## Volume Adjustment

To increase or decrease the volume level, turn the [  ] knob on the front panel or press the [ VOL+ ] / [ VOL- ] button on the remote control. The volume range is from "0" to "50". The screen displays the volume level for 3 seconds.




## EQ Menu

The Audio Control feature allows you to easily adjust your audio system to meet the acoustic characteristics of your vehicle, which vary depending on the type of vehicle and its measurements. Proper setting of the Fader and Balance boosts the effects of the cabin equalizer.



## Select Preset Equalizer

1. Enter the EQ setup mode  
Touch the [  ] icon in the user interface and the EQ setup interface will display on the screen.
2. Select EQ mode  
Touch the desired EQ selection: [ Optimal ] / [ Classic ] / [ Rock ] / [ Jazz ] / [ Techno ] / [ Pop ], and the EQ mode will change.

## Adjust EQ Parameters













To adjust EQ parameters, touch and drag the parameters adjustment bar.

- [ User ]: Set the desired audio effect.
- [ Flat ]: Select the original audio effect.
- [ Reset ]: Cancel the equalizer function settings.
- [ Loud: On/Off ]: When listening to music at low volumes, this feature will selectively boost certain bass and treble frequencies.



## Adjust FAD BAL

You can adjust front/back/left/right balance of the speaker and the subwoofer volume to get balanced listening effect according to the surroundings and your interest.

1. Enter the EQ setup mode  
Touch the [  ] icon in the EQ interface.
2. Adjust subwoofer volume  
Touch [  ] / [  ] or drag [  ] under "Sub" to adjust subwoofer volume from -12 to +12.
3. Adjust fader / balance value  
Touch [  ] / [  ] / [  ] / [  ] to adjust fader / balance value from -20 to +20.
  - [  ]: Front speaker
  - [  ]: Rear speaker
  - [  ]: Left speaker
  - [  ]: Right speaker



### Notes:

1. The EQ mode will change to 'User' automatically when you adjust the frequency value in all modes except 'User'.
2. The value of Sub is independent of EQ mode and can be adjusted separately.

# Basic Operations

## Set Date /Time

1. Touch [ Settings ] on the playing source menu.
2. Touch [ Time ].  
The date/time setup menu is displayed.



### Set Date

1. Touch [ Date ].
2. Touch the date information on the screen .  
A submenu is displayed.
3. Touch [ ▲ ] or [ ▼ ] to set year, month and day.

### Set Clock Mode

1. Touch [Clock mode].
2. Touch [12Hr] or [24Hr] to switch to clock mode.

### Set Time

1. Touch [ Time ].
2. Touch the time on the screen, a submenu is displayed.
3. Touch [ ▲ ] or [ ▼ ] to set hour and minute. Touch [ ▲ ] or [ ▼ ] to set AM/PM (only for 12Hr).

#### Tip:

When date/time is set, touch [ Save ] to confirm or [ Cancel ] to exit.

## Tuner Menu

1. Touch to view the SOURCE MENU.
2. Preset stations list
3. Touch to view the second line of control bar
4. Touch to seek backward
5. Touch to access Equalizer settings menu
6. Touch to seek forward
7. Touch to change band
8. Clock
9. Status indicator
10. The frequency of current station
11. Save/recall the desired radio station
12. Touch to receive Local or Distant stations
13. Enter frequency directly
14. Search and store stations automatically



## Select Radio as Playing Source

Touch [Radio] on the main source menu.

## Select One Radio Band

Press the [BAND] button on remote control or touch the [📶] icon on the user interface to select one radio band from FM1, FM2, FM3, AM1 and AM2.

## Tune

### Auto Tuning

Press the [◀] / [▶] button on the remote control briefly or hold [◀] / [▶] icon on the user interface for more than 1 second to seek a higher / lower station.

To stop searching, repeat the operation above or press other keys having radio functions.

### Note:

When a station is received, searching stops and the station is played.

## Manual Tuning

### Method 1:

During manual tuning, the frequency will be changed in steps.

Press the [▲] or [▼] button on remote control or touch the [◀] / [▶] icon on the user interface to tune in a higher / lower station.

### Method 2:

1. Touch the numeric keypad icon [🔢]. Numeric keyboard is displayed, touch numbers to input frequency. For US frequencies make sure to add "0" at the end. Ex. 102.70
2. Touch [✕] to delete the input numbers step by step.
3. Touch [OK] to enter.



## Preset Station

The unit has 5 bands, such as FM1, FM2, FM3, AM1, AM2, and each band can store 6 stations; hence the unit can store 30 stations in total.

## Search Stations Automatically

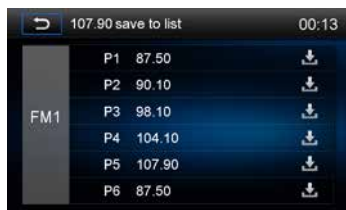
Touch [🔍] to search and store the 6 strongest stations in the current band automatically.

## Manual Store

1. Tune to a station manually.
2. Touch [⬇️].
3. Touch one of the channels P1 to P6 to save the selected station.

## Tune to a Preset Station

1. Touch [Radio].
2. Touch one of the preset channels (P1 to P6) on the screen.



## Local Seeking

Touch the [📶] icon and choose Local or Distance.

When the [📶] icon turns bright, only stations with a strong signal strength will be detected. Default is "Distance".

## EQ Selection

Press the [📊] icon and enter the EQ setup.

# Playback Mode

## Load a Disc


You can play video, audio or images stored on the following discs:

- DVD Video, DVD-R, DVD-RW
- VCD
- Audio CD, CD-R, CD-RW

### Note:

Ensure that the disc contains playable content.

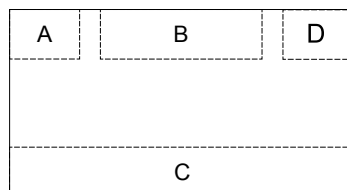
## Eject a Disc

Press the [  ] key on the front panel or on the remote control to eject the disc. When the disc is ejected, the unit switches to the previous source.


## Touch Screen Controls

The touch key areas for DVD playback are outlined below:

- A: Return to the main menu
- B: Play the video and display playback information
- C: Display onscreen control menu
- D: Time display



## Controlling Playback

To access the on-screen controls, touch the screen anywhere except for the upper left corner and touch again to cancel display. Touch [  ] to view all function icons.

## Connect an USB Device

1. Open the USB door.
2. Insert the small end of the USB cable into the 3.5 jack and the USB socket, then connect the other end of the cable to your USB device.

## Remove an USB Device

1. Select another source in the main menu.
2. Remove the USB device.



## Play/Pause

1. Once a disc or USB is inserted, play starts automatically.  
For DVD movie, if a menu appears, press [▶] to start play.
2. To pause, touch [⏏].  
To resume play, touch [▶].
3. Skip to previous / next track / chapter, press [⏮] / [⏭] key.



## Previous/Next

Touch [⏮] / [⏭] key on the screen to skip to previous / next track / chapter.



## Search for a Folder

### For Video Files

1. Touch [📁] to display all available video folders.
2. Touch a folder, then touch the desired file.
3. Touch the file again to start play.

### For Audio Files

1. Touch [🎵] to display all available audio folders.
2. Touch a folder, then touch the desired file.
3. Touch the file again to start play.

### For Picture Files

1. Touch [🖼️] to display all available picture folders.
2. Touch a folder, then touch the desired file.
3. Touch the file again to start play.

### For Folder Control

1. Touch [📁] to display all available folders.
2. Touch a folder, then touch the desired file.
3. Touch the file again to start play.



## Repeat

### For DVD/VCD movie disc:

1. Touch bottom half of the screen to display menu on the screen, if necessary.
2. Touch [⋮] to display the 2nd menu.
3. Touch [↺] repeatedly to select:

DVD

[↺] Repeat chapter: Play the current chapter repeatedly.

[↺] Repeat title: Play all chapters in the title repeatedly.

[↺] Repeat all: Play all titles repeatedly.

[↺] Repeat off: Cancel repeat play.






VCD

[↺] Repeat single: Play the current single repeatedly.

[↺] Repeat all: Play all chapters repeatedly.


[↺] Repeat off: Cancel repeat play.

### For CD/MP3 files:

1. Touch anywhere except the upper left corner to display menu on the screen, if necessary.
2. Touch [  ] repeatedly:
  - [  ] Repeat all: Play all tracks in the disc or storage repeatedly.
  - [  ] Repeat all: Play all tracks in current folder repeatedly.  
(only for the disc or storage including folders.)
  - [  ] Repeat single: Play the current single track repeatedly.
  - [  ] Repeat off: Cancel repeat play.



### Repeat A-B

You can repeat a specific of video file (repeat A-B).

1. Touch the screen to display control menu, if necessary.
2. Touch [  ] to display the 2nd menu, if necessary.
3. Touch [ A-B ] repeatedly to mark:
  - Repeat A-: the start of the section to repeat.
  - Repeat A-B: the end of the section to repeat.The selected section plays repeatedly.
4. To exit A-B repeat mode, touch A-B repeatedly, [Repeat A-B off] is displayed.



### Shuffle (Random) Play

You can play audio tracks/files in random order.

1. Touch the screen to display control menu, if necessary.
2. Touch [  ] to display the 2nd menu, if necessary.
3. Touch [  ] on the screen or press [ RANDOM ] on the remote control repeatedly to turn random play on or off.



### Select Audio Mode

When you play VCDs, you can select an audio mode (R/L/Stereo).

1. During play, touch bottom half of the screen to display menu on the screen, if necessary.
2. Touch [  ] to display the 2nd menu.
  - Touch [  ] repeatedly until the audio mode is selected.

### Select Subtitle Language

For DVD discs that contain two or more subtitle languages.

1. During play, touch the screen to display menu on the screen, if necessary.
2. Touch [  ] to display the 2nd menu.
3. Touch [  ] repeatedly to select a language.
  - The selected language is displayed.




### Change Viewing Angle

Some DVDs contain alternate scenes, such as scenes recorded from different camera angles. For such DVDs, you can select from the available alternate scenes.

1. During play, touch the screen to display menu on the screen, if necessary.
2. Press [ Angle ] repeatedly on the remote control.
  - The viewing angle is changed.

# Playback Mode

## Video Setup

Touch [  ] to access video setup mode, touch [  ] or [  ] to set the desired effect.

You may set the brightness, contrast, saturation and hue of the video output from 1 to 20.



## Playback Information

Touch the screen when playing back DVD and VCD discs and the playback information will be displayed on the top area of the TFT.

### For DVD

1. Disc type.
2. DVD Title information. "01/08" indicates that this DVD has 8 titles and the title playing back now is the first title.
3. DVD Chapter information. "005/012" indicates that current title has 12 chapters and the chapter playing back now is the fifth chapter.



### For VCD


1. Disc type.
2. VCD Track information. "01/08" indicates that this VCD has 8 tracks and the track playing back now is the first title.



### Elapsed Time



1. Elapsed time of the current track.
2. Total time of the current track.

## Direct Chapter Entry

To select a chapter directly, touch the [  ] icon on screen control to display the direct entry menu. Enter the desired track using the on-screen number pad. Press [ OK ] to the selected track.





## Rotate Pictures

1. When you view pictures, touch the screen to display menu on the screen, if necessary.
2. Touch [  ] to display the 2nd menu.
3. Touch [  ] repeatedly to rotate the picture.

## Zoom

You can zoom in pictures for a close view.

1. When you view pictures, touch the screen to display menu on the screen, if necessary.
2. Touch [  ] to display the 2nd menu.
3. Touch [  ] repeatedly to zoom in the picture.




## Bluetooth Mode

You can make or receive phone calls with Bluetooth-enabled phones through the unit. You can also listen to music from a Bluetooth-enabled device.

### Pair the Bluetooth-enabled Devices

To connect your Bluetooth device to the unit, you need to pair the device to the unit. Pairing needs only to be done once. You can pair up to five devices. You also can search for Bluetooth devices by mobile phone.

1. Turn on the Bluetooth function on the device.
2. Touch [  ] to search for Bluetooth device with the unit.
3. Select the Bluetooth device "M9970" in the pairing list.
4. Enter default password "0000".




Tip:

- The operational range between this unit and a Bluetooth device is approximately 3 meters.
- Before you connect a Bluetooth device to this unit, familiarize yourself with the Bluetooth capabilities of the device.
- Compatibility with all Bluetooth devices is not guaranteed.
- Any obstacle between this unit and a Bluetooth device can reduce the operational range.
- Keep this unit away from any other electronic device that may cause interference.

### Disconnect Bluetooth Device

To disconnect one device, touch [  ].

Tip

- The device will also be disconnected when the device is moved beyond the operational range.
  - If you want to reconnect the device to the unit, place it within the operational range.
  - If you do not want to reconnect the device to the unit automatically, touch [  ], then set [ Auto connect ] to [ Off ].
- For details, see the "Adjust Bluetooth Settings" section.



### Make a Call

1. Select Bluetooth function in the home menu.
2. Pair the phone with the unit.
3. Search for phone number from the following list:
  - [Phone Book]
  - [Call Log]
  - [Missed calls]
  - [Received calls]
  - [Dialed calls]

Or touch the number pad directly, then touch [  ] to dial.

## Receive a Call

By default, all incoming calls are received automatically.

1. If there is an incoming call, "Incoming call..." will appear on the screen.
2. You may touch the screen to select [ Hang up ] or [ Answer ].  
Speak into the Bluetooth microphone.

### Tip

- You can select to receive calls manually by setting [Auto answer] to [Off] status.



## Adjust Bluetooth Settings

1. In Bluetooth menu, touch [ ⚙ ].  
The option menu is displayed.
2. Touch on the selected option to change the setting.
  - [Bluetooth]: To turn on or off "Bluetooth" function.
  - [Auto connect]: To turn on or off "Auto connect" function.
  - [Auto answer]: To turn on or off "Auto answer" function.
  - [Pairing code]: To set pairing code.
  - [Phone book sync]: To synchronize phone book, touch [ OK ] on the sub-menu popped out.

Phonebook sync may take several minutes to load on initial setup.



### Tip

- You can also adjust Bluetooth settings in the "Settings" menu.

## Music Mode

### A2DP

A2DP is short for Advanced Audio Distribution Profile. The mobile phones supporting this function can transmit stereo audio, whereas the ones not supporting this function can transmit mono audio only.

### AVRCP

AVRCP is short for Audio/Video Remote Control Profile. The mobile phones supporting this function can control the playback of a Bluetooth audio player.



To make a call in music playing mode, press the number keys on the mobile phone and the music player will stop. "Calling" will be displayed on the TFT and once the call is received the caller audio will be transferred to the unit. When the call ends, the screen will display the music playing menu.

If there is an incoming phone call, the music player will stop and the screen will display "Incoming". When the call ends, the screen will display the music playing menu.

## Display System

1. Touch the upper left corner to display the main menu.
2. Touch [ Settings ].  
The settings menu is displayed.

## Adjust General Settings

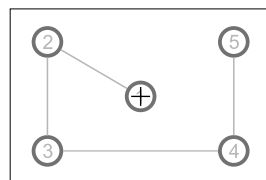
1. Touch [ General ], if necessary.
2. Touch to highlight a setting.
3. Touch to display/select an option.
4. Touch blank area of the screen to close the sub-menu.

General settings	Options	Description
Radio region	Select one that matches your location.	
Radio range	Local	Select Local to receive only stations with extremely strong signal.
	Distance	
Blackout	Off/10s/20s	Set the screensaver.
Dimmer mode	Night/Dark/Normal/Bright	Adjust the display brightness.
Beep	On	Turn on the beep sound. Each time you press a button, the unit beeps.
	Off	Turn off the beep sound.
Calibration	Start	Calibrate the touch screen.
TFT open	Auto on	Turn TFT open Auto on
	Auto off	Turn TFT open Auto off
	Manual	Turn TFT open Manual

## Calibration

When the touch operation is not sensitive or valid, you should calibrate the touch screen using the calibration setting function. Adjust the response positions of the touch panel as followings:

1. Press the [ Calibration ] option on the setup menu to enter.
2. Touch [ Start ] to enter.
3. Press and hold the center of [ + ] for 2 seconds, the [ + ] will move automatically.
4. Aim at center of [ + ], follow the path as shown in the figure.  
Once steps 1-5 are complete the system will automatically exit calibrating mode.



## Adjust Video Settings

1. Touch [Video].
2. Touch an option repeatedly to select:

Video settings	Options	Description
parking	On	Disable video when driving.

The playback of movies and images on the device display is allowed only while the vehicle is parking. If you play movies and images when driving, the screen shows Warning information.

# Settings

## Adjust Sound Settings

1. Touch [Sound].
2. Touch an option repeatedly to select:
3. Touch blank area to close the sub-menu.

Sound settings	Options	Description
Sub woofer	On	Turn on the subwoofer.
	Off	Turn off the subwoofer
Sub woofer filter	80Hz	Select subwoofer filter criteria.
	120Hz	
	160Hz	

## Adjust Time Settings

1. Touch [ Time ].
2. Touch an option repeatedly to select:
3. Touch blank area to close the sub-menu.

Sound settings	Options	Description
Date	Y/M/D	Touch [ ▲ ] or [ ▼ ] to set year, month and day.
Clock mode	12Hr/24Hr	Touch [12Hr] or [24Hr] to switch clock mode.
Time	H/M	Touch [ ▲ ] or [ ▼ ] to set hour and minutes.
		Touch [ ▲ ] or [ ▼ ] to set AM/PM (only for 12Hr).

## Adjust Language Settings

1. Touch [Language].
2. Touch an option repeatedly to select.
3. Touch blank area of the screen to exit.

Language settings	Description
OSD	Select on-screen display language.
DVD audio	Select DVD audio language. Options available depending on DVD disc.
DVD subtitle	Select DVD subtitle language. Options available depending on DVD disc.
Disc menu	Select DVD menu language. Options available depending on DVD disc.

## Adjust Bluetooth Settings

1. Touch [Bluetooth].
2. Touch an option repeatedly to select.

Bluetooth settings	Options	Description
Bluetooth	On	Turn on the Bluetooth function.
	Off	Turn off the Bluetooth function.
Auto connect	On	If the pre-paired device is within the effective range, the unit re-connects to pre-paired device automatically.
	Off	Need to re-connect manually.
Auto answer	On	Answer paired phone call automatically.
	Off	Answer phone call manually.
Pairing code	Set the password for pairing the unit with other Bluetooth devices.	
MIC Setting	Internal	Use internal microphone
	External	Use external microphone (need to be connected)

## Adjust DVD Rating

1. Touch [DVD].
2. Touch an option repeatedly to select.
3. Touch blank area to close the sub-menu.

DVD rating	Options	Description
Set password	Set password to restrict the play of discs. The default password is 4321.	
Rating level	Kid safe	Acceptable for children.
	G	Acceptable for general viewers.
	PG	Parental guidance suggested.
	PG-13	Unsuitable for children under age 13.
	PG-R	Recommend parents to restrict viewing for children under 17 .
	R	Restricted re-parental guidance is advised for children under the age of 17.
	NC-17	Unsuitable for children under age 17.
	Adult	Acceptable for adults only.
DRC	On/Off	Dynamic range compression on or off.
Load factory	Restore to default settings.	

## Adjust Volume Settings

You can set different volumes for different modes.

1. Touch [Volume].  
The volume setting sub-menu is displayed.
2. Touch to select a source.
3. Touch [ ▲ ] or [ ▼ ] to assign value: 0 to 12.  
When switching to the source, the volume increases automatically.
4. Touch blank area to close the sub-menu and touch top left of the screen to exit setting menu.

### Listen to Other Devices

You can connect an external audio/video device to the unit.

1. Connect the external device with the supplied AV cable.
2. Touch the upper left corner to display the main menu.
3. Touch [ AV-IN 1 ] / [ AV-IN 2 ] to access external device.

### Reset

When the unit hangs up, you can reset it.

Press [ RESET ] with a ball-point pen or similar tool.

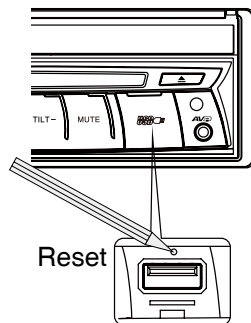
#### Tip

When the unit has been reset, all the settings will return to default settings.

### Replace a Fuse

If there is no power, the fuse may be damaged and need to be replaced.

1. Remove the unit from the dashboard.
2. Check all electrical connections.
3. Buy a fuse that matches the amperage of the damaged fuse.
4. Replace the fuse while the unit is powered off.



# Specifications

## General

Reference Supply Voltage.....	12V(DC)
Operating Voltage Range.....	10.5 - 15.8V(DC)
Max Operating Current.....	15A
Grounding System.....	Negative
Dimensions(WXHxD) .....	178x50x(160+34)mm
Weight(main unit) .....	2.00kg

## FM

Signal Noise Ratio.....	≥55dB
Residual Noise Sensitivity (S/N=30dB) .....	18dBμV
Frequency Response (±3dB) .....	20Hz~12.5KHz
Station Seeking Level.....	20~28dBμV
Distortion .....	≤1.0%
Stereo Separation (1KHz) .....	≥25dB
Antenna Impedance .....	75Ω

## AM

Residual Noise Sensitivity (S/N=20dB) .....	30dBμV
Selectivity (±9KHz) .....	≥50dB

## Screen

Screen Size .....	7 inches(16:9)
Display Resolution.....	800X480

## DVD Player

S/N Ratio .....	80dB
THD+N .....	≤0.1%
Frequency Response (±3dB) .....	20Hz~20KHz
Maximum Output Power.....	4x45W
Load Impedance.....	4Ω

## AUX IN

Distortion .....	≤0.5%
Frequency Response (±3dB) .....	20Hz~20KHz
Audio Input Level.....	0.5Vrms

## Preout

Output Impedance .....	100Ω
Output Level .....	2V

## Video

Normal Video Input Level (CVBS) .....	1.0±0.2V
Video Input Impedance.....	75Ω
Video Output Impedance.....	75Ω
Video Output Level.....	1.0±0.2V

## Environment

Operating Temperature .....	-10°C ~ +60°C
Storing Temperature.....	-20°C ~ +70°C
Operating Humidity.....	45%~80%RH
Storing Humidity .....	30%~90%RH

## Notice:

When the unit is operated to extremes, such as with maximum power output for a long time, or the temperature is over 70°C, it will enter heat protection mode and the volume will be reduced automatically. This is normal.

Due to continuous product development, specifications may be subject to change without prior notification.

## Supported Formats:

- USB or memory file format: FAT16,FAT32
- Mp3 bit rate(date rate): 32-320 Kbps and variable bit rate
- Directory nesting up to a maximum of 8 levels
- Number of albums/folders: maximum 99
- Number of tracks/titles: maximum 999
- ID3 tag v2.0 or later
- File name in Unicode UTF8(maximum length:128 bytes)

## Unsupported Formats:

- Empty albums: an empty album is an album that does not contain MP3 files,and is not be shown in the display.
- Unsupported file formats are skipped. For example,Word documents(.doc) or Mp3 files with extension.dlf are ignored and not played.
- WMA, PCM audio files

## Supported MP3 Disc Format:

- ISO9660,Joliet
- Maximum title number: 512(depending on file name length)
- Maximum album number: 255
- Supported sampling frequencies: 32kHz,44.1kHz,48kHz
- Supported bit-rates: 32-320Kbps and variable bit rates

## Supported Video Formats:

- VCD
- DVD
- MP4
- RMVB

## Region Code

According to DVD sales regions, the whole world is divided into six regions. A DVD disc can be played back only when its region code is compatible with that of the player in use.

Region 1: USA, Canada, East Pacific Ocean Islands;

Region 2: Japan, West Europe, North Europe, Egypt, South Africa, Middle East;

Region 3: Taiwan of China, Hong Kong of China, South Korea, Thailand, Indonesia, South East Asia;

Region 4: Australia, New Zealand, Mid & south America, South Pacific Ocean Islands/Oceania;

Region 5: Russia, Mongolia, India, Middle Asia, East Europe, North Korea, North Africa, North West Asia;

Region 6: China, Mainland.

## Precautions when using Discs

- 1) DO NOT use irregular shaped discs.
- 2) Disc cleaning:  
Use a dry, soft cloth to wipe the disc from center to edge, only neutral detergent can be used.
- 3) When playing a new disc:  
New discs may have some rough spots around the inner and outer edges. If such a disc is used, remove these rough spots with a pencil or ball-point pen, etc.



## Troubleshooting

What appears to be a problem is not always serious. Please check the following points before calling a service center.

Problem	Cause	Corrective action
<b>General</b>		
Unit does not power on	Unit fuse blown.	Install new fuse with correct rating.
	Car battery fuse blown.	Install new fuse with correct rating.
	Illegal operation	Reset the unit.
Remote control does not work	Battery depleted.	Change the battery.
	Battery installed incorrectly.	Install the battery correctly.
No/low audio output	Improper audio output connection.	Check wiring and correct.
	Volume set too low.	Increase volume level.
	Speakers damaged.	Replace speakers.
	Heavily biased volume balance.	Adjust the channel balance to center position.
	Speaker wiring is in contact with metal part of car.	Insulate all speaker wiring connections.
Poor sound quality or distortion	Pirated disc is in use.	Use original disc.
	Speaker power rating does not match unit.	Replace speakers.
	Wrong connections.	Check wiring and correct.
	Speaker is shorted.	Check wiring and correct.
Unit resets itself when engine is off	Incorrect connection between ACC and BATT.	Check wiring and correct.
<b>TFT monitor</b>		
Monitor does not open automatically	TFT Auto Open is turned off.	Turn TFT Auto Open on.
Warning information is shown at all times	Parking break wiring is not correct.	Check wiring and correct.
Flashing image or interference appears on screen	The color system of DVD disc does not match the monitor.	Adjust the color system of the DVD disc playing back or the monitor in use.
	Pirated disc is in use.	Use original disc.
	Video cable damaged.	Replace cables.
	Improper video signal connections.	Check wiring and correct.
<b>Disc playback</b>		
Cannot insert disc	A disc is already inside the unit.	Eject current disc and insert new one.
Disc does not play back	Disc is warped or scratched.	Use disc in good condition.
	Disc is dirty or wet.	Clean disc with soft cloth.
	Incompatible disc is used.	Use compatible disc.
	Disc is inserted upside down.	Insert disc with label side up.
	Disc region code is not compatible with unit.	Use disc with proper region code.
PBC cannot be used during VCD playback	PBC is not available on the disc.	Use disc with PBC available.
Repeat or search function is invalid during VCD playback	PBC is on.	Turn PBC off.
<b>Error messages</b>		
No disc	Disc is dirty.	Clean disc with soft cloth.
	Disc is upside down.	Insert disc with label side up.
	No disc inside.	Insert disc.
Bad disc	Disc is dirty.	Clean disc with soft cloth.
	Disc is upside down.	Insert disc with label side up.
Unknown disc	Disc format is not compatible with this unit.	Use disc with compatible format.
Region error	DVD region code is not compatible with this unit.	Use disc with compatible region code.

# Wire Connections

