//////ALPINE®

9-INCH ADVANCED MULTIMEDIA STATION
i109ED/i109AD

8-INCH ADVANCED MULTIMEDIA STATION
i108ED/i108AD

Made for
iPod iPhone

USB
PLAYBACK

Bluetooth®

flac
free lossless audio codec

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

- OWNER'S MANUAL
  Please read before using this equipment.

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WARNING

Points to Observe for Safe Usage

- *Read this manual carefully before using this system components. They contain instructions on how to use this product in a safe and effective manner. Alpine cannot be responsible for problems resulting from failure to observe the instructions in this manual.*
- *This manual uses various pictorial displays to show you how to use this product safely and to alert you to potential dangers resulting from improper connections and operation. Following are the meanings of these pictorial displays. It is important to fully understand the meanings of these pictorial displays in order to use this manual and the system properly.*
- *Operation of the system while driving is dangerous. Users should stop vehicle before operating the software.*
- *Setup operations cannot be made if the car is moving. The car must be parked and the parking brake must be engaged.*

⚠ WARNING

This symbol means important instructions. Failure to heed them can result in serious injury or death.

INSTALL THE PRODUCT CORRECTLY SO THAT THE DRIVER CANNOT WATCH TV/VIDEO UNLESS THE VEHICLE IS STOPPED AND THE EMERGENCY BRAKE IS APPLIED.

It is dangerous (and illegal in many states) for the driver to watch TV/Video while driving a vehicle. Installing this product incorrectly enables the driver to watch TV/Video while driving. This may cause a distraction, preventing the driver from looking ahead, thus causing an accident. The driver or other people could be severely injured.

DO NOT WATCH VIDEO WHILE DRIVING.

Watching the video may distract the driver from looking ahead of the vehicle and cause an accident.

DO NOT OPERATE ANY FUNCTION THAT TAKES YOUR ATTENTION AWAY FROM SAFELY DRIVING YOUR VEHICLE.

Any function that requires your prolonged attention should only be performed after coming to a complete stop. Always stop the vehicle in a safe location before performing these functions. Failure to do so may result in an accident.

KEEP THE VOLUME AT A LEVEL WHERE YOU CAN STILL HEAR OUTSIDE NOISES WHILE DRIVING.

Excessive volume levels that obscure sounds such as emergency vehicle sirens or road warning signals (train crossings, etc.) can be dangerous and may result in an accident. LISTENING AT LOUD VOLUME LEVELS IN A CAR MAY ALSO CAUSE HEARING DAMAGE.

MINIMIZE DISPLAY VIEWING WHILE DRIVING.

Viewing the display may distract the driver from looking ahead of the vehicle and cause an accident.

DO NOT DISASSEMBLE OR ALTER.

Doing so may result in an accident, fire or electric shock.

USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND.

(Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

KEEP SMALL OBJECTS SUCH AS SCREWS OUT OF THE REACH OF CHILDREN.

Swallowing them may result in serious injury. If swallowed, consult a physician immediately.

USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES.

Failure to do so may result in fire or electric shock.

DO NOT BLOCK VENTS OR RADIATOR PANELS.

Doing so may cause heat to build up inside and may result in fire.

USE THIS PRODUCT FOR MOBILE 12V APPLICATIONS.

Use for other than its designed application may result in fire, electric shock or other injury.

DO NOT PLACE HANDS, FINGERS OR FOREIGN OBJECTS IN INSERTION SLOTS OR GAPS.

Doing so may result in personal injury or damage to the product.

⚠ CAUTION

This symbol means important instructions. Failure to heed them can result in injury or material property damage.

HALT USE IMMEDIATELY IF A PROBLEM APPEARS.

Failure to do so may cause personal injury or damage to the product. Return it to your authorized Alpine dealer or the nearest Alpine Service Centre for repairing.

KEEP FINGERS AWAY WHILE THE MOTORIZED FRONT PANEL OR MOVING MONITOR IS IN MOTION.

Failure to do so may result in personal injury or damage to the product.

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Discs Playable on This Unit

Playable Discs

The discs listed below can be played on this unit.

	Mark (logo)	Recorded content	Disc size	Max. playing time
DVD Video	**DVD** VIDEO™	Audio + Video	12 cm*	One-sided disc Approx. 4 hours
				Two-sided disc Approx. 8 hours
Video CD	COMPACT disc DIGITAL VIDEO / VIDEO CD	Audio + Video	12 cm	Approx. 74 Minutes
Music CD	COMPACT disc DIGITAL AUDIO / COMPACT disc DIGITAL AUDIO TEXT	Audio	12 cm	Approx. 74 Minutes

* Two-layer DVD disc compatible

Discs that cannot be played

DVD-RAMs, CD-ROMs (excluding MP3/WMA/AAC/WAV files), photo CDs, etc.

DualDisc

This unit is not compatible with DualDisc.
Using a DualDisc may cause unit malfunction, and may cause disc damage when the disc is inserted/ejected.

DVD region number (playable region number)

Region numbers supported by this unit are as follows. DVDs with a region number other than those listed below, cannot be played on this DVD player.

	Region number	
i108ED/i109ED	3	ALL
i108AD/i109AD	4	ALL

Video CDs

This unit is compatible with playback control (PBC) compatible video CDs (version 2.0).
"PBC" is a function by which you can use menu screens recorded on the disc to find the scene you want to watch and view various types of information in dialog style.

Using compact discs (CD/CD-R/CD-RW)

If you use unspecified compact discs, correct performance cannot be guaranteed.
You can play CD-Rs (CD-Recordable)/CD-RWs (CD-ReWritable) which have been recorded only on audio devices.
You can also play CD-Rs/CD-RWs containing MP3/WMA/AAC/WAV formatted audio files.

- Some of the following discs may not play on this unit:
  Flawed discs, discs with fingerprints, discs exposed to extreme temperatures or sunlight (e.g., left in the car or this unit), discs recorded under unstable conditions, discs on which a recording failed or a re-recording was attempted, copy-protected CDs which do not conform to the audio CD industry standard.
- Use discs with MP3/WMA/AAC/WAV files written in a format compliant with this unit. For details, see page 16.

To customers using CD-R/CD-RW
- If a CD-R/CD-RW cannot be played back, make sure the last recording session was closed (finalized).
- Finalize the CD-R/CD-RW if necessary, and attempt playback again.

Using DVD-Rs/DVD-RWs/DVD+Rs/DVD+RWs

- This unit is compatible with discs recorded in the standard DVD-Video format.
- Note that discs not finalised (processed to enable to play on playback-only DVD players) cannot be played on this DVD player.
- Some discs may not play back, depending on the recording device and disc format.
- Discs or files utilizing copy protection, may not be playable. Some recording systems may not properly format copied files to enable proper playback.
- In the following cases, the disc may not play on this unit: discs recorded by certain DVD recorders, certain irregular discs, flawed discs, dirty discs, when the pickup lens of this DVD player is dirty, or when moisture condensation has occurred inside the unit.
- Be sure to follow all cautions included with your DVD-Rs/DVD-RWs/DVD+Rs/DVD+RWs discs.
- Do not put stickers, seals, or tape on the label side of DVD-Rs/DVD-RWs/DVD+Rs/DVD+RWs.
- Compared to the regular discs, DVD-Rs/DVD-RWs/DVD+Rs/DVD+RWs are more affected by heat, moisture, and direct sunlight. If left in a car, etc., damage may occur and it might not play on this unit.
- The operable temperature range for disc playback is as follows:
  DVD-R/DVD-RW: -25 ~ +70°C
  DVD+R/DVD+RW: +5 ~ +55°C

Protecting the USB connector

- Only an iPod/iPhone or USB memory can be connected to the USB connector on this unit. Correct performance using other USB products cannot be guaranteed.
- A USB hub is not supported.
- Depending on the connected USB memory device, the unit may not function or some functions may not be performed.
- The audio file format that can be played back on the unit is MP3/WMA/AAC/WAV/FLAC.
- Artist/song name, etc., can be displayed. Certain, special characters may not be correctly displayed.

- *This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.*
- *Manufactured under licence from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.*
- *Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.*
- *iPhone, iPod, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. Lightning is a trademark of Apple Inc.*
- *"Made for iPod," and "Made for iPhone," mean that an electronic accessory has been designed to connect specifically to iPod, or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, or iPhone may affect wireless performance.*
- *Android is trademark of Google Inc.*
- *The Android robot is reproduced or modified from work created and shared by Google and used according to terms described in the Creative Commons 3.0 Attribution License.*
- *The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Alpine Electronics, Inc. is under license. Other trademarks and trade names are those of their respective owners.*
- *The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.*
- *MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson. Supply of this product only conveys a licence for private,non-commercial use and does not convey a licence nor imply any right to use this product in any commercial (i.e. revenue-generation) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent licence for such use is required. For details, please visit http://www.mp3licensing.com*

Getting Started

Accessory List

- Main Unit...1
- Power Cable (i108ED/i108AD only).....................................1
- Microphone (i108ED/i108AD only) 1
- REM/PRE OUT cable 1
- AUX OUT/CAMERA cable 1
- USB extension cable 1
- Cushion..1
- Screw (M5×8) 8
- Owner's Manual 1set

Location of Controls

For i108ED/i108AD
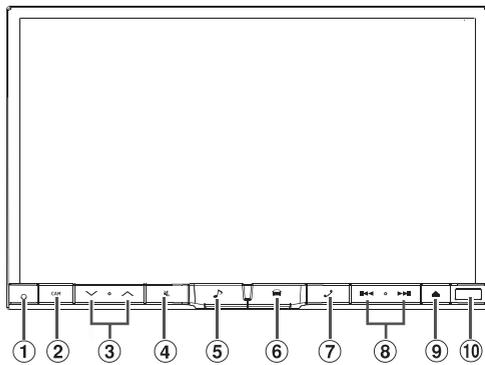
For i109ED/i109AD
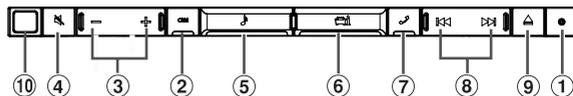
- *This is only an example illustration, about the name and layout of buttons, please refer to your vehicle.*

① **RESET switch**
   The system is reset.

② **CAM (CAMERA) button**
   Display the camera view image.

③ ∨/∧ **(for i108ED/i108AD) or -/+ (for i109ED/i109AD) button**
   Press to adjust the volume.

④ 🔇 **(MUTE) button**
   Press to activate/deactivate the mute mode.
   Press and hold this button for at least 2 seconds to turn the display off.

⑤ ♪ **(AUDIO) button**
   Press to change the source.
   Press and hold this button for at least 2 seconds to turn the power off.

⑥ 🚗 **(CAR) button**
   Recalls the Car information screen. (Ready for the future)
   Press and hold this button for at least 2 seconds to recall the Home screen.
   - *Vehicle Information is the function that can be realized in the future system upgrade.*
   - *Car information screen is available only when this unit is connected to vehicle via OBD2 cable.*

⑦ ☎ **(PHONE) button**
   Recalls the Telephone Menu screen.

⑧ ◄◄ / ►►| **button**
   Press to seek down/up station in radio mode or down/up track, chapter, etc., in other audio/visual source.

⑨ ⏏ **(Eject) button**
   Recalls the EJECT/TILT screen.
   If the disc does not eject after touching [⏏ Disc] of DISC, press and hold this button for at least 2 seconds.

⑩ **Remote Sensor**
   Point the remote control transmitter towards the remote sensor within a range of 2 metres.

Optional Remote Control Interface Box
This unit is operable using the vehicle's secondary radio controls. An Remote Control Interface Box (optional) is required. For details, contact your dealer.

Controllable with Remote Control
This unit can be controlled with an optional remote control. For details, consult your dealer. Point the optional remote control transmitter at the remote control sensor.

About the button descriptions used in this Owner's Manual
The buttons found on the face of the unit are expressed in bold (e.g. ♪ **(AUDIO)**). The buttons found on the touch-screen display are shown in bold within brackets, [ ] (e.g. [✕]).

Turning Power On or Off

Some of this unit's functions cannot be performed while the vehicle is in motion. Be sure to stop your vehicle in a safe location and apply the parking brake, before attempting these operations.

1 **Turn the ignition key to the ACC or ON position.**
   The system turns on.

2 **Press and hold the ♪ (AUDIO) button for at least 2 seconds to turn the power off.**

- *The unit can be turned on by pressing ♪ (AUDIO), 🚗 (CAR) or ⏏ (Eject) button..*

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Initial System Start-Up

Be sure to press the RESET switch when using the unit for the first time, after changing the car battery, etc.

1 Turn off the unit power.

2 Press RESET switch with a ballpoint pen or similar pointed object.

RESET switch
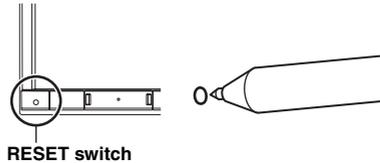
Inserting/Ejecting a Disc

Inserting the Disc

1 Press ⏏ (Eject).
The Open/Tilt screen is displayed.

2 Touch [⏏ Disc].

3 Insert the disc with the label side facing up.

Disc Slot
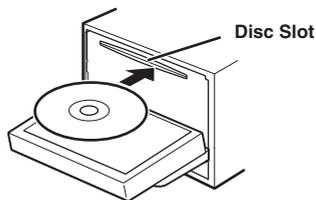
Insert the disc until it is automatically pulled into the unit.
The unit starts to play the disc.

Removing the Disc

1 Press ⏏ (Eject).
The Open/Tilt screen is displayed.

2 Touch [⏏ Disc].
The monitor will open. Then the disc is ejected.
When the disc has been ejected part way, take it out.
• *Even if no disc is inserted, the monitor will open after touching [⏏ Disc].*

3 Touch [Close], or press any button.

• *If the disc does not eject after touching [⏏ Disc], press and hold ⏏ (Eject) for at least 2 seconds.*
• *Do not apply shock to the monitor when it is open as it may result in malfunction of the unit.*
• *The monitor will stop at the set tilt angle when closing.*

Adjusting the Screen Viewing Angle

Adjust the screen's angle for better visibility.

1 Press ⏏ (Eject).
The Open/Tilt screen is displayed.

2 Touch [Up] or [Down] to adjust the desired screen angle.
The screen angle can be adjusted in 5 stages.

3 Touch [✕] to return to the normal mode.

• *The screen colour will vary when viewed at certain angles. Adjust the screen angle for the best viewing position.*

Adjusting the Volume

Adjust the volume by pressing ∨, ∧*[1] (or -,+)*[2].
Volume decreases/increases continuously by pressing and holding ∨, ∧*[1] (or -,+)*[2].
Volume: 0 - 35

[1] For i108ED/i108AD
[2] For i109ED/i109AD

Lowering Volume Quickly

Activating the Audio Mute function will instantly lower the volume level to 0 dB.

1 Press 🔇 to activate the MUTE mode.

2 Pressing 🔇 again will bring the audio back to its previous level.

Common Operations

How to Input Characters and Numbers (Keypad)

Character input is required for model name setting, etc.
The displayed screens and procedures may vary slightly depending on the function used, but the basic input method is the same.
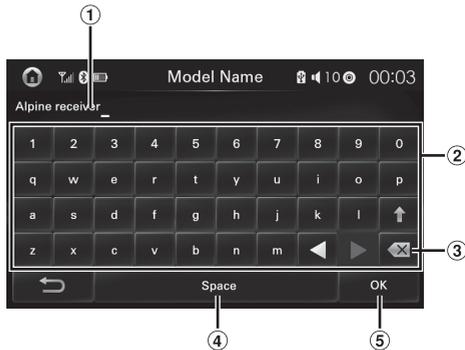
① Input screen area.
② Character keypad
③ ⊗ (Delete)
Returns to the previous character and erases it.
Touching here for more than 2 seconds will erase all input characters.
④ Space
⑤ Input number is confirmed.

Switching Sources

Press the ♪ button or touch a source icon on the Home screen to switch to the desired available source.

■ Switching Sources Using the ♪ (AUDIO) Button

Press the ♪ (AUDIO) button repeatedly to switch to the desired available source.

Tuner → DISC*[1] → BT Audio*[1] → USB/iPod*[1] → HDMI*[1] → AUX/DVB-T*[2] → Tuner

*[1] When no disc is inserted or no USB memory/iPod/HDMI device/ BLUETOOTH compatible device is connected, this option is not available.
*[2] DVB-T is available only when AUX Select is set to "DVB-T" and an optional Mobile Digital TV Receiver (DVB-T) is connected.

Rear Entertainment Function

The rear entertainment function independently routes different sources to the front and the rear inside a car. For example, while listening to the radio or other audio source in the front, DVD can be enjoyed in the rear with the optional rear monitor and headphones.

1 **Press and hold 🚗 (CAR) button for at least 2 seconds to recall the Home screen.**

2 **Swipe the screen from right to left.**
The [RSE] button displays.

3 **Touch [RSE]*.**
Rear source Select display appears.

* *Displayed only when Rear Seat Entertainment is On (page 21).*
* *Touching [⬅] on the Rear selection screen will change to the main source screen.*

4 **Touch the desired visual source (such as auxiliary input, built-in DVD) to select.**

* *Touch [Off] will not choose any source for rear monitor.*
* *Depending on the status, some Rear source items may not be available in some case. (For example, when there is no DVD disc inserted on this unit, you cannot set "Disc" as Rear source.)*
* *Touch [AUTO] to set the rear source the same as the main unit playing visual source.*
* *If Auto is selected, the DVD/USB video playback for rear monitor will be paused during a conversation of the connected Bluetooth compatible mobile phone.*
* *If the front source is AUX, DVD or Camera, HDMI is not available for rear source.*

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Vehicle Information (Ready for the future)

Vehicle Information is the function that can be realized in the future system upgrade. Available information differ depending on your vehicle. For details, refer to your vehicle's instruction manual.
This unit allows to get the information of your vehicle via OBDII cable.
Speed/Engine/Gear position/Engine oil temperature/coolant temperature/Battery Voltage/Room lighting/Tire pressure/Fuel consumption/Travelling time/Fuel information may be displayed on this unit.

Press 🚗 (CAR) button.
The Vehicle Information screen is displayed.
This operation can also be performed by touching [Vehicle] on the Home screen.

① Speed
② Engine RPM
③ Gear position
④ Engine oil temperature
⑤ Coolant temperature
⑥ Battery Voltage
⑦ Room lighting (ON/OFF)
⑧ Tire Pressure Level (PSI)
⑨ Fuel consumption
⑩ Travelling time
⑪ Fuel Level (Liters)

Selecting an Item in a List

To scroll through a list, perform the following operations.
Touch [▲] or [▼] to scroll the list up or down.

About the Indicator Display

The Indicator Bar on the top of the screen displays various types of information, like the current time.
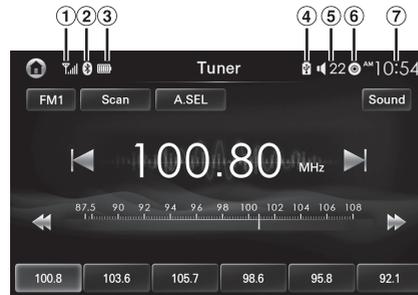
① Indicates the signal strength level of the connected Bluetooth compatible device*.
② Lights up when connected to a Bluetooth compatible device*.
③ Indicates the battery level of the connected Bluetooth compatible device*.
④ Lights up when a supported USB memory or iPod/iPhone is connected via USB connector.
⑤ The volume level display
⑥ Lights up when a disc is inserted.
⑦ The clock display
You can switch between the 12 hour display and 24 hour display options. For details, refer to "Setting the time" (page 22).

* Does not display when "Bluetooth Set" is set to off.

Radio

Setting the Radio source ON/OFF
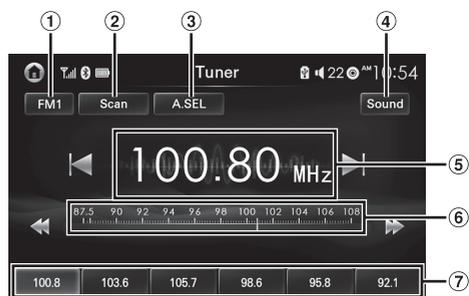
① Band button
② Scan button
③ Auto preset button
④ Sound setting button, turn to Sound Setup screen directly.
⑤ Frequency display
⑥ Frequency Bar
⑦ Preset buttons

Listening to the Radio

1 Press and hold 🚗 **(CAR)** button for at least 2 seconds to recall the Home screen.

2 Touch **[Tuner]**.
The radio mode is activated and the display changes to the Radio mode screen.

3 Touch **[FM1]** , etc. to select the desired radio band.
Each touch changes the bands as follows:

FM1 → FM2 → AM → FM1

4 Touch **[◄]** or **[►]** to tune in the desired station.

- *Touch [◄◄] or [►►] to change the frequency by step.*
  Touch and hold [◄◄] or [►►] to change the frequency continuously.
- *You can also touch the Frequency Bar to adjust the frequency directly.*

Presetting Stations Manually

1 Tune in a desired radio station you wish to store in the preset memory by manual or automatic seek tuning.

2 Touch and hold any one of the preset buttons for at least 2 seconds.
The selected station is stored.

3 Repeat the procedure to store up to 5 other stations onto the same band.
To use this procedure for other bands, simply select the desired band and repeat the procedure.

A total of 18 stations can be stored in the preset memory (6 stations for each band; FM1, FM2 or AM).

- *If a preset memory has already been set in the same preset number, it will be cleared and the new station will be memorized.*

Presetting Stations Automatically

The tuner can automatically seek and store 6 strong stations in the selected band.

After selecting the desired band (FM1,FM2 or AM), touch [A.SEL].
The tuner automatically seeks and stores 6 strong stations into the preset buttons.
When automatic storing has completed, the station stored in the preset 1 is selected.

- *If no stations are stored, the tuner will return to the original station you were listening to before the automatic storing procedure began.*
- *You can cancel this process by touching [Cancel] while the tuner is automatically seeking stations. Cancelling will return the tuner preset to the previous setting.*

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Tuning to Preset Stations

You can tune in the preset stations in memory on either band using its preset number.

1 Touch **[FM1]** , etc. to select the desired radio band.

2 Touch any one of the preset buttons that has a station stored to it.
The preset station is received.

Scanning Station

Touch [Scan] to activate the Browse mode.
Each station of the current band (FM or AM) will be broadcasted for 5 seconds.
The Browse mode will stop automatically when all stations are scaned.
To stop scanning, touch **[Scan Off]** and the current station will be received.

CD/Compressed Disc

Display example for CD main screen

① CD Text
② Total time
③ Elapsed time
④ Current song no./Total song no.

Display example for MP3/WMA/AAC/WAV main screen

① Song Information
② Total time
③ Elapsed time
④ Current song no./Total song no.

• *If there is no CD text, the message "No Text" appears.*

Playback

1 Press and hold 🚗 (CAR) button for at least 2 seconds to recall the Home screen.

2 Touch **[Disc]**.
The display shows the Disc mode screen.

When a disc is inserted into the disc slot of this unit, with the label side facing up, the unit starts playback of the disc.

3 Touch [◄◄] or [►►] to select the desired track (file).

Returning to the beginning of the current (or previous) track (file):
Touch [◄◄].
If a song is played more than 1 second, return to the beginning of the current song. Otherwise, jump to the previous song.

Fast reverse :
Touch and hold [◄◄].

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Advancing to the beginning of the next track (file) :
Touch [▶|].

Fast forward :
Touch and hold [▶|].

4 **To pause playback, touch [❚❚].**
Touch [▶] again to start playback.

- *This unit can play back MP3/WMA/AAC/WAV files saved to CD. Use a format compliant with this unit.*
  For further information about playing or storing MP3/WMA/AAC/WAV files, refer to page 16 before using the unit.
- *Any file protected by DRM (Digital Rights Management) copy protection, cannot be played back on this unit.*
- *If a disc contains both CD audio data and MP3/WMA/AAC/WAV data, this unit plays back only the CD audio data.*
- *The track display for CD audio data playback shows the track numbers recorded on the disc.*
- *If an MP3/WMA/AAC/WAV disc with many files and folders is played, it may take longer than normal to start playback.*
- *The playback time may not be correctly displayed when a VBR (Variable Bit Rate) recorded file is played back.*
- *This unit does not support FLAC format disc's playback.*

Repeat Play

Touch [⟳] to repeatedly play back.
The tracks (files) will be played repeatedly.
The repeat mode switches every time the button is touched.

CD:

Repeat One	→	Repeat All	→	Repeat One

MP3/WMA/AAC/WAV:

Repeat One	→	Repeat Folder*	→	Repeat All	→	Repeat One

- ** Only files in a folder are repeatedly played back.*
- *If the Repeat Play mode is activated during random playback, the random mode will be cancelled.*

Random Play

Touch [⤬] during playback.
The tracks (files) on the disc will be played back in a random sequence.

The random mode switches every time [⤬] is touched.

CD:

Random All	→	(OFF)	→	Random All

MP3/WMA/AAC:

Random Folder*	→	Random All	→	(OFF)	→	Random Folder*

- ** Only files in a folder are played back in random sequence.*
- *If the random mode is activated during Repeat playback, the Repeat Play mode will be cancelled.*
- *If you select a track by using the search mode, the random play mode will be cancelled.*

Selecting Folders (Concerning MP3/WMA/AAC/WAV)

Touch [≪] or [≫] to select the folder.

Searching from CD Text

1 **Touch [Search] during playback.**
The CD text search screen is displayed.

2 **Touch the selected track name.**
The selected track will be played back.

File/Folder Name Search (Concerning MP3/WMA/AAC/WAV)

1 **Touch [Search] during playback.**
The search mode is activated.

2 **Touch the desired folder name.**
The File name of the selected folder is displayed.

3 **Touch the desired file name.**
The selected file is played back.

- *To return to the previous hierarchy, touch [⬑].*

Scanning Song

Touch [Scan] to activate the Scan mode.
Each song stored in the Disc will be played back for 10 seconds.
The Scan mode will stop automatically when all songs in the Disc are scaned.

To stop scanning, touch [Scan Off] and the current song will be played back.

Viewing song information (Concerning MP3/WMA/AAC/WAV)

Touch [Disp.] to change the song information as below.

Song Name Artist Name Album Name	→	Folder Name File Name	→	Song Name Artist Name Album Name

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About MP3/WMA/AAC File of Disc

CAUTION

Except for private use, duplicating audio data (including MP3/WMA/AAC data) or distributing, transferring, or copying it, whether for free or for a fee, without permission of the copyright holder is strictly prohibited by the Copyright Act and by international treaty.

Supported playback sampling rates and bit rates

MP3
Sampling rates: 48 kHz, 44.1 kHz, 32 kHz, 24 kHz, 22.05 kHz, 16 kHz, 12 kHz, 11.025 kHz, 8 kHz
Bit rates: 8 - 320 kbps

WMA
Sampling rates: 48 kHz, 44.1 kHz, 32 kHz, 22.05 kHz, 16 kHz, 11.025 kHz, 8 kHz
Bit rates: 8 - 320 kbps

AAC
Sampling rates: 48 kHz, 44.1 kHz, 32 kHz, 24 kHz, 22.05 kHz, 16 kHz, 11.025 kHz, 8 kHz
Bit rates: 8-384 kbps

This device may not play back correctly depending on sampling rates.

Media supported

The media that this device can play back are CD-ROMs, CD-Rs, CD-RWs, DVD-Rs, DVD-RWs, DVD+Rs, DVD+RWs and USB memory.

About WAV File of Disc

WAV, whose official name is "WAVE FORMAT" is a standard format of Windows® audio file.
- Extension: ".wav"
- Sampling rate: 44.1 kHz
- Quantization bit number: 16
- Channel number: up to 2ch
- Format: PCM only

DVD/Video CD

Display example for DVD Video main screen

Disc types that can be used for each heading are represented by the following marks.

DVD-V — DVD Commercial Video discs (used for the distribution of movies, etc.) or a DVD-R/DVD-RW, DVD+R/DVD+RW recorded in a video mode can be used.

VCD — Video-CD discs can be used.

Playing a Disc DVD-V VCD

This unit has a built-in DVD player. When an optional Alpine DVD/Video CD/CD player (or DVD changer) is connected to this unit, you can control it from this unit (except some operations).

⚠ **WARNING**

It is dangerous for the driver to watch the TV/DVD/Video while driving the vehicle. The driver may be distracted from looking ahead and an accident could occur.

Install this unit correctly so that the driver cannot watch TV/DVD/Video unless the vehicle is stopped and the emergency brake is applied.

If this unit is not installed correctly, the driver will be able to watch the TV/DVD/Video while driving the vehicle and may be distracted from looking ahead causing an accident. The driver or other people could be severely injured.

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To display the Disc mode screen

`DVD-V` `VCD`

• *If you try to activate the auxiliary device while driving, the display will show the warning-For your safety, video playback is only available while the vehicle is parked.*

> ⚠ **Caution**
> • **Not all functions will operate for every DVD. See the individual DVD's instructions for details on the features supported.**
> • **Fingerprints on a disc may adversely affect playback. If a problem occurs, remove the disc and check for fingerprints on the playback side. Clean the disc if necessary.**
> • **If you switch the power or Ignition Key OFF or change sources during playback, playback will continue where you left off when you resume playback.**
> • **If you try to perform an invalid operation (based on the type of disc being played), the following mark is displayed on the monitor screen: ⊘**

1 **If there is a disc in the unit, press and hold 🚗 (CAR) button for at least 2 seconds to recall the Home screen.**

2 **Touch [Disc].**
The display shows the DISC mode screen.

• *If there is no disc in the unit, insert a disc with the label side facing up. The unit starts to play the disc.*
• *The display mode can be changed by touching [Wide]. For operation, see "Switching Display Modes" on page 18.*

Inserting/Ejecting a Disc

Refer to "Inserting/Ejecting a Disc" (page 10).

• *The reverse side of a double-sided DVD will not be played automatically. Remove the disc, turn it over, and reinsert it.*
• *If the disc does not eject, press and hold ⏏ for at least 2 seconds.*
• *Do not insert discs containing maps for the navigation system. Doing so could result in damage.*
• *Refer also to "Disc Setup" (page 30).*

To display the Function Guide

`DVD-V` `VCD`

For DVD Video:

1 Touch the visual screen in the DVD mode.
2 Touch [Control] on the right top corner.

For Video CD:

1 Touch the visual screen in the Video CD mode.

• *The Function Guide changes to the visual screen in the DVD or Video CD mode for 5 seconds after an operation has been performed.*

If a menu screen appears

On DVDs and Video CDs with playback control (PBC), menu screens may appear automatically. If this happens, perform the operation described below to start playback.

Direct Menu Operations `DVD-V`

1 Touch the DVD menu directly.

• *Some operations cannot be performed depending on the disc.*

Menu Operations `DVD-V`

1 Touch [>] to change the function guide.
2 Touch [Menu Control] to display the menu operation mode screen.

3 Select a desired menu item by touching [∧], [∨], [<] or [>].
4 Touch [Enter] to confirm the selected item.

• *You can change the key panel position by touching [←] or [→].*
• *Touch [X] to close the menu operation screen.*

Numeric Keypad Input Operations `DVD-V`

1 Touch [>] to change the function guide.
2 Touch [Menu Control] to display the menu operation mode screen.

3 Touch [Key] on the left top corner.
The numeric keypad input mode screen appears.

Touch [X] to close the numeric keypad input screen.

4 Touch a desired number.
5 Touch [Enter] on the numeric keypad mode screen to confirm your selection.

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1 Touch [>] to change the function guide.
2 Touch [Track Search].
   The numeric keypad is displayed.
3 Touch and input a desired number.
4 Touch [Enter] to confirm.

Displaying the Top Menu Screen DVD-V

When a DVD contains two or more titles, the top menu screen appears.

1 Touch [>] to change the function guide.
2 Touch [Top Menu] on the DVD mode main screen.
The top menu screen appears.

• *To perform necessary operations, see "If a menu screen appears" on page 17.*

Displaying the Menu Screen DVD-V

With a DVD having two or more menus, a menu screen will appear for the programmes available, in addition to the main programmes.

1 Touch [>] to change the function guide.
2 Touch [Menu] on the DVD mode main screen.
   The menu screen appears.

• *To perform necessary operations, see "If a menu screen appears" on page 17.*

Displaying the Menu Operation Mode Screen DVD-V

1 Touch [>] to change the function guide.
2 Touch [Menu Control].
   The menu operation mode screen appears.

• *For further operation, see "If a menu screen appears" on page 17.*

Stopping Playback DVD-V VCD

Touch [■] during playback.
"Stop" is displayed, and playback stops.

• *Playback starts from the beginning when [▶/Ⅱ] is touched while playback is stopped.*

Fast-forwarding/Fast-reversing
DVD-V VCD

1 **During playback, touch and hold [Ⅰ◀◀] (Fast-reverse) or [▶▶Ⅰ] (fast-forward).**
   When touched and held for more than 1 second, the disc is forwarded/reversed at double speed. When held for 5 more seconds or longer, the disc is forwarded/reversed at 8 times the normal speed. When held for 10 seconds or longer, the disc is forwarded/reversed at 32 times the normal speed.

2 **Stop touching [Ⅰ◀◀] or [▶▶Ⅰ] to return to normal playback.**

• *No sound is played during fast-forwarding/fast-reversing.*
• *For DVDs and Video CDs with playback control (PBC), the menu screen may reappear during fast-forwarding/fast-reversing.*
• *Operation may not be possible, depending on the disc.*

Finding the Beginnings of Chapters/ Tracks DVD-V VCD

During playback, touch [Ⅰ◀◀] or [▶▶Ⅰ].
The chapter/track switches each time the button is touched, and playback of the selected chapter/track starts.

   ▶▶Ⅰ : Touch this to start playback from the beginning of the following chapter or track.
   Ⅰ◀◀ : Touch this to start playback from the beginning of the current chapter or track.

• *Some DVDs do not have chapters.*
• *Be sure to turn PBC off before starting the search (see "Setting the Video CD Play Mode" on page 30).*

Playing Still Frames (Pausing)
DVD-V VCD

1 **During playback, touch [▶/Ⅱ].**

2 **Touch [▶/Ⅱ] to resume playback.**

• *No sound is played during the still frame mode.*
• *The image or sound may stop temporarily when playback starts from the pause mode. This is not a malfunction.*

Forward/reverse frame-by-frame Playback DVD-V VCD

1 **In the pause mode, touch [Ⅰ◀◀] or [▶▶Ⅰ].**
   The picture advances or reverses by one frame each time the button is touched.

2 **Touch [▶/Ⅱ] to return to normal mode.**

• *No sound is output during forward/reverse frame-by-frame playback.*
• *Reverse frame-by-frame cannot be carried out on the Video CD.*

Switching Display Modes DVD-V VCD

1 **Touch [>] to change the function guide.**

2 **Touch [Wide], [Cinema] or [Normal].**
   The display mode list is displayed.

   Wide (Initial)/Cinema/Normal

3 **Touch the desired display mode**
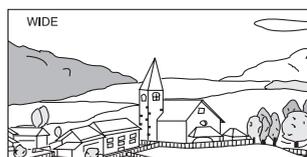
WIDE

In Wide mode, the monitor displays a normal picture wider to fit in a wide-screen monitor by evenly stretching out the picture horizontally.
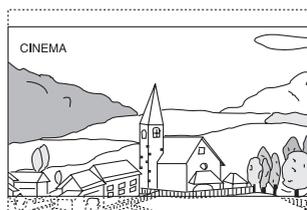
CINEMA

In Cinema mode, the monitor displays a normal picture by stretching out the picture horizontally and vertically. This mode is good for displaying a cinema type picture at the 16:9 ratio.
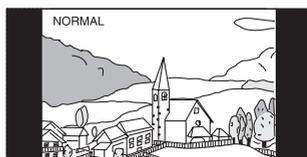
NORMAL

In Normal mode, the monitor displays a normal picture at the centre of the screen with a vertical black band at each side.

Repeat Playback (DVD-V) (VCD)

Use this function to play the disc's titles, chapters or tracks etc., repeatedly.

DVD Video

1 **Touch [>] to change the function guide.**

2 **Touch [Repeat].**
The repeat mode switches every time the button is touched.

Repeat Chapter	The chapter is played repeatedly.
Repeat Title	The title is played repeatedly.
Repeat Off	The playback returns to normal mode.
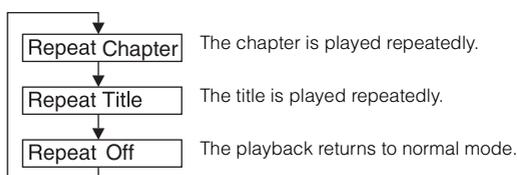
* *Display may vary depending on the disc.*

Video CD

1 **Touch [>] to change the function guide.**

2 **During playback, touch [Repeat].**
The repeat mode switches every time the button is touched.

| Repeat Track | The track is played repeatedly. |
| Repeat Off | Playback does not repeat. |

* *Display may vary depending on the disc.*
* *The track/disc repeat modes cannot be used on Video CDs with playback control (PBC). These modes can be carried out after turning PBC off. See "Setting the Video CD Play Mode" on page 30.*
* *For some discs it is not possible to switch the repeat mode.*

Searching by Title Number (DVD-V)

Use this function to easily find positions on the DVD using the DVD's title number.

1 **Touch [>] to change the function guide while playback is stopped.**

2 **Touch [Menu Control] to display the menu operation mode screen.**

3 **Touch [Key].**
The numeric keypad input mode screen appears.

4 **Enter a desired title by touching its title number.**
See page 17 for operation of the numeric keypad.

5 **Confirm your selection by touching [Enter].**
Playback will start from the title number selected.

* *This function cannot be used on discs on which no title numbers are recorded.*
* *Some disc may not accept any operation.*

Searching Directly by Chapter or Track
(DVD-V) (VCD)

Use this function to easily move to the beginnings of the chapters or tracks on the disc.

1 **During playback, touch [>] to change the function guide.**

For DVD Video :

2-1 **Touch [Menu Control] to display the menu operation mode screen.**

2-2 **Touch [Key].**
The numeric keypad input mode screen will appear.

For Video CD :

2 **Touch [Track Search].**
The numeric keypad input mode screen will appear.

3 **Touch and enter the chapter or track number you want to play.**
See page 17 for operation of the numeric keypad.

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4 **Touch [Enter] to confirm your selection.**
Playback will start from the selected chapter or track.

- *This function is not available for a disc on which chapters or tracks are not stored.*
- *Be sure to turn PBC off before starting the search (See "Setting the Video CD Play Mode" on page 30).*

Switching the Angle (DVD-V)

On DVDs in which scenes have been filmed from multiple angles, the angle can be switched during playback.

1 **During playback, touch [>] to change the function guide.**

2 **Touch [Angle].**
The angle switches between the angles recorded on the disc every time the button is touched.

- *Some time may be required for the angle to change.*
- *Depending on the disc, the angle may switch in one of two ways.*
- *Seamless: The angle switches smoothly.*
- *Non-seamless: When the angle is switched, a still picture is displayed first, after which the angle switches.*

Switching the Audio Tracks

(DVD-V) (VCD)

DVDs with multiplex audio or audio languages allow switching the sound during playback. You can also make this setting in "Disc Setup" on page 30.

DVD Video

1 **During playback, touch [>] to change the function guide.**

2 **Touch [Audio].**
The sound switches between the alternate audio tracks recorded on the disc every time the button is touched.

- *The alternate track selected becomes the default setting every time the power is turned on or the disc is replaced. If the disc does not include that track, the disc's default language is selected instead.*
- *Not all discs will allow changing the alternate audio tracks during playback. In these cases, select audio tracks from the DVDs menu.*
- *There may be a delay before the selected alternate track begins to play.*

Video CDs with multiplex audio

1 **During playback, touch [>] to change the function guide.**

2 **Touch [Audio].**
The left and right channels will be output as shown, each time the button is touched.

Audio LR → Audio LL → Audio RR → Audio LR

Switching the Subtitles (Subtitle Language) (DVD-V)

With DVDs on which multiple subtitle languages are recorded, the subtitle language can be switched during playback; moreover, subtitles can be hidden. You can also make this setting in "Disc Setup" on page 30.

1 **During playback, touch [>] to change the function guide.**

2 **Touch [Subtitle].**
Touching this button repeatedly selects sequentially the subtitle languages recorded on the disc, and then turns the subtitles OFF.

- *There may be a delay before the selected subtitle appears.*
- *Not all discs will allow changing the subtitles during playback. In these cases, select subtitles from the DVDs menu.*
- *The subtitle language selected becomes the default setting every time the power is turned on or the disc is replaced. If the disc does not include that language, the disc's default language is selected instead. However, the subtitle language may differ depending on the disc.*
- *For some discs, the subtitles will be displayed even when this is set to OFF. However, the subtitle language may differ depending on the disc.*

Switching from the disc menu

(DVD-V)

For some discs, the audio language, angle and subtitles can be switched from the disc menu.

1 **Touch [>] to change the function guide.**

2 **Touch [Menu] or [Top Menu] to display the menu.**

3 **Select an item to confirm it.**
See "If a menu screen appears" on page 17.

Displaying the Disc Status for DVD/Video CD (DVD-V) (VCD)

Use the procedure described below to display the status (title number, chapter number, etc.) of the currently playing DVD or of the currently playing Video CD (track number, etc.) on the monitor.

During playback, touch [Disp.].
The disc status is displayed for 5 seconds.

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Setup

Setup Operation

Touch the **[Setup]** icon on the Home screen to display the Setup main screen.

[Setup] icon

General Setup

General Setup Operation

> **The following steps 1 to 4 are common operations to each "Setting item" of General Setup. Refer to each section for details.**

1 Touch [Setup] icon on the Home screen.
The Setup main screen is displayed.

2 Touch [General].
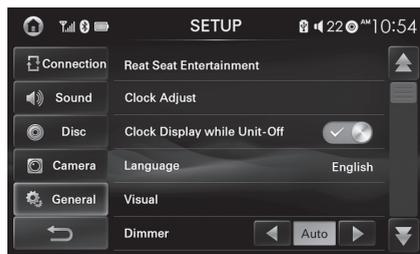
The General Setup screen appears.

3 Select the desired item and change the setting.

Setting items: Rear Seat Entertainment/Clock Adjust/Clock Display while Unit-Off/Language/Visual/Dimmer/Steering Remote Learning*/Screen Alignment Adjustment/AUX Select/About/Clear All Settings
* Only for i108ED/i108AD.

4 Touch [⬅] to return to the previous screen.

Rear Seat Entertainment Setting

Setting the Rear Seat Entertainment System On/Off

Video and audio can be output to the rear monitor.

Setting item: Rear Seat Entertainment
Setting contents: Off (Initial setting) / On

Remote Sensor Setting

For remote control operation, the remote sensor of the external device (monitor, etc.) can be switched, as you prefer.

Setting item: Remote Sensor
Setting contents: Front (Initial setting) / Rear

Front: The remote sensor of this unit is effective.
Rear: The remote sensor of the external monitor connected to AUX OUTPUT of this unit becomes effective. The remote control operates the source connected to the AUX OUTPUT terminals.

• *If the Rear Seat Entertainment is "Off", the setting is not displayed.*

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Setting the time

You can adjust the Clock displays on this unit via this setting,

Setting item: Clock Adjust
Further setting items: Clock Mode/Clock Adjust
Setting contents: 24H (Initial setting)/12H/Hour/Minute

1   Touch **[12H]** or **[24H]** to switch the clock mode.

2   Touch [▲] / [▼] to adjust the hour and minute.
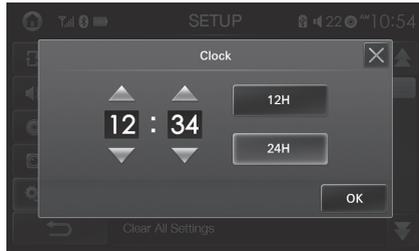
3   Touch **[OK]** to confirm.
• Touch [X] to close the Clock Adjusting screen,

Turning Clock Display On/Off while unit-Off

You can make the unit display the clock while unit-Off.

Setting item: Clock Display while Unit-Off
Setting contents: Off/On (Initial setting)

Off: Clock does not display when the unit power is off.
On: Clock displays even when the unit power is off.

Setting the System Language

The Setup menu, feedback information, etc. for this unit can be changed to appear in the selected language.

Setting item: Language
Setting contents: English (Initial setting)/Thai/Bahasa Indonesia

Visual Setting

You can adjust the brightness and contrast of visual source by this setting.

Setting item: Visual
Further setting items: Video*[1]/Rear Camera*[2]/Top View Camera*[3]/Side Camera*[4]
Setting contents: Brightness (0-9) (Initial setting 5)
Contrast (0-9) (Initial setting 5)

*[1] *Enables only when watching a video source (DVD, USB video, etc.).*
*[2] *Enables only when Direct camera or AUX camera is set to "Rear Camera".*
*[3] *Enables only when Direct camera is set to "Top View Camera".*
*[4] *Enables only when AUX camera is set to "Side Camera".*

Setting the Brightness of the Backlighting

Backlighting is provided by a fluorescent light built into the liquid crystal panel. The illumination control adjusts the brightness of the backlighting based on the car ambient lighting for easier viewing.

Setting item: Dimmer
Setting contents: Off / Auto (Initial setting) / On

On: Keep the background illumination of the monitor dark.
Auto: Adjust the brightness of the background illumination of the monitor automatically to the brightness of the car interior.
Off: Deactivate Auto Dimmer mode to keep the background illumination of the monitor bright.

Steering Remote Setting (i108ED/ i108AD Only)

Touch **[Steering Remote Learning]** on the General setup menu in step 3. Refer to "General Setup Operation" (page 21).

Turning Steering Remote Learning On/Off

This unit is compatible with the adaptive steering remote control. This function allows operation by sending the steering remote control signal to the unit. For details, consult your nearest Alpine dealer.

Setting item: Steering Remote Learning
Setting contents: Off (Initial setting)/On

Off: steering remote control is not available.
On: steering remote control is available after setting the keys (page 23).

Setting the Steering Remote keys

Perform the following operations to use steering remote control function.

Setting item: Key Setup

1 **Touch the left key of your selected function. (e.g. Select POWER)**

2 **Press and hold the corresponding steering remote control button (e.g. power button), the changed signal value of steering remote control appears on the left key.**

3 **Touch the right key to capture the setting value, and then release the steering remote control button.**

The changed signal value of steering remote control

4 **Repeat steps 1 to 3, and set each button.**
When settings have been completed, Touch [ ] to return to the previous mode.

Adjusting the Touch Panel

Adjustment becomes necessary when the display position on the LCD and the touch position on the touch panel do not match.

Setting item: Screen Alignment Adjustment

1 **Touch [Screen Alignment Adjustment].**
A confirmation message is displayed.

2 **Touch [Start it].**
• *If you touch [Next time] no adjustment is done, and returns to the previous screen.*

3 **Accurately touch the Center of "+" mark more than 1 second at several points.**

4 **Touch [OK].**
This completes adjustment, and returns to the previous screen.

Setting the AUX Mode

Setting item: AUX Select
Setting contents: AUX RCA (Initial setting)/DVB-T/Mini Jack
AUX RCA: Set when an external device with RCA output connector is connected.
DVB-T: Set when a DVB-T tuner is connected.
Mini Jack: Set when an external device with Mini Jack output connector is connected.

Displaying the Product Information

You can view the version information of this product. Make note of this information and refer to it whenever you contact Alpine Tech Support or an Alpine-authorized dealer.

Setting item: About
Contents: Model Name/Main Ver. /Multimedia Ver./Bluetooth ver./ Bluetooth Address
• *Touch [Model Name] the Model Name input screen appears, you can change it according to your own preferences.*

Initializing the General Setup

You can initialize all data of General Setup to restore the factory settings.

Setting item: Clear All Settings

1 **Touch [Clear All Settings].**

2 **After the confirmation message appears, touch [OK].**
The General setting starts initialization.
• *Touching [Cancel] will cancel the setting.*

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# Sound Setup

Sound Setup Operation

The following steps 1 to 4 are common operations to each "Setting item" of Sound Setup. Refer to each section for details.

1 Touch **[Setup]** icon on the Home screen.
The Setup main screen is displayed.

2 Touch **[Sound]**.
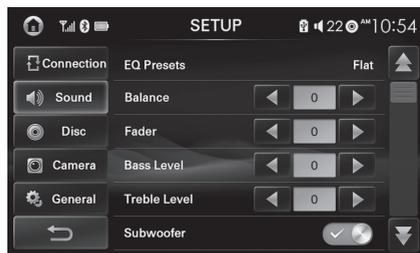
The Sound Setup screen appears.

3 Select the desired item and change the setting.

Setting items: EQ Presets[1]*/Balance/Fader/Bass Level*[1]*/Treble Level*[1]*/Subwoofer/Subwoofer Level*[2]*/Subwoofer Phase*[2]*/Media Xpander*[1]*/Parametric EQ*[1]*/X-OVER/Time Correction/Defeat/Key Sound/Restore Default Setting*

[1] These items cannot be adjusted when Defeat is set to On.
[2] These items cannot be adjusted when Subwoofer is set to Off.

4 Touch **[↩]** to return to the previous screen.

Equalizer Presets

[EQ Presets] is selected on the Sound setup menu in step 3. Refer to "Sound Setup Operation" (page 24).
10 typical equalizer settings are preset at the factory for a variety of musical source material.

Setting item: EQ Presets
Setting contents: Flat (Initial setting)/Pop/Rock/News/Jazz/ Electronic/Hip Hop/Easy Listening/Country/ Classical

- *Only one type can be selected.*
- *When Equalizer Presets is set, the linked Parametric EQ settings are also changed. We recommend storing Parametric EQ settings in a Preset in advance.*
- *The Equalizer Presets setting can be configured when Defeat is "Off".*
- *When the parametric EQ, Bass Level or Treble Level are adjusted , the Equalizer Presets will be set to "User" automatically.*

Adjusting the Balance

Touch **[◄]** or **[►]** to adjust the sound volume of the left and right speaker.

Setting item: Balance
Setting range: L15 to R15 (Initial setting: 0)

Adjusting the Fader

Touch **[◄]** or **[►]** to adjust the sound volume of the front and rear speaker.

Setting item: Fader
Setting range: F15 to R15 (Initial setting: 0)

Adjusting the Bass Level

Touch **[◄]** or **[►]** to emphasize or weaken the bass frequency.

Setting item: Bass Level
Setting range: -7 to +7 (Initial setting: 0)

Adjusting the Treble Level

Touch **[◄]** or **[►]** to emphasize or weaken the Treble frequency.

Setting item: Treble Level
Setting range: -7 to +7 (Initial setting: 0)

Turning Subwoofer ON/OFF

If an optional subwoofer is connected to the unit, make the following setting.

Setting item: Subwoofer
Setting contents: On / Off (Initial setting)

Adjusting the Subwoofer Level

You can set the Subwoofer level when a Subwoofer is connected.

Setting item: Subwoofer Level
Setting contents: 0 to 15 (Initial setting: 0)

Setting the Subwoofer Phase

The subwoofer output phase is toggled Subwoofer Normal (0°) or Subwoofer Reverse (180°).

Setting item: Subwoofer Phase
Setting contents: 0° (Initial setting) / 180°

Setting the MX (Media Xpander)

MX (Media Xpander) makes vocals or instruments sound distinct regardless of the music source. The FM radio, CD, USB audio and iPod/iPhone, will be able to reproduce the music clearly even in cars with a lot of road noise. When the currently playing source is AM radio band, this option is not available.

Setting item: Media Xpander

1 Touch **[ON]** of "All MX Off/On" in the MX setup screen.

2 Touch any of **[OFF] [MOVIE1] [MOVIE2] [DVD MUSIC]**.

Media	Level			
	OFF	1	2	3
FM	OFF	.□□	.□□	.□□
DVD	OFF	MOVIE1	MOVIE2	DVD MUSIC
CD	OFF	.□□	.□□	.□□
Compress Media	OFF	.□□	.□□	.□□
AUX	OFF	Compress Media	MOVIE	MUSIC
HDMI	OFF	Compress Media	MOVIE	MUSIC

- *The MX setting can be performed only when a source is currently selected.*
- *Compressed disc/iPod/USB/BLUETOOTH Audio correspond to MX Compress Media.*

MX FM
The medium to high frequencies become more clear, and produces well balanced sound in all the bands.

MX DVD

(Movie)
The dialog portion of the video is reproduced more clearly

(DVD Music)
This disc contains a large quantity of data such as music clip. MX uses this data to reproduce the sound accurately.

MX CD
CD mode processes a large quantity of data. This data is used to reproduce the sound cleanly by making use of the data quantity.

MX Compress Media
This corrects information that was omitted at the time of compression. This reproduces a well-balanced sound close to the original.

MX AUX
Choose the MX mode (Compress Media, Movie, or Music) that corresponds to the media connected.

MX HDMI
Choose the MX mode (Compress Media, Movie, or Music) that corresponds to the media connected.

- *To cancel MX mode for all music applications, set All MX Off/On to "OFF" in step 1.*
- *Each music applications, such as FM radio, CD, and Compress media can have its own MX setting.*
- *The function is inoperable when Defeat is set to "On".*

Adjusting the Parametric Equalizer Curve (Parametric EQ)

You can modify the Equalizer settings to create a response curve more appealing to your personal taste.

Setting item: Parametric EQ

1 Adjust the Parametric EQ to your preference.
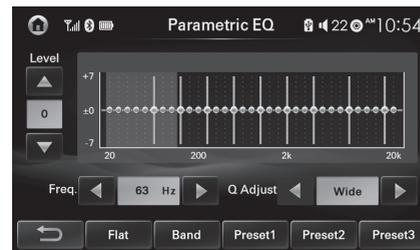
Adjusting the Band

Touch [Band] to select the band to be adjusted.

→ Band1 → Band2 → ⋯ → Band8 → Band9 →
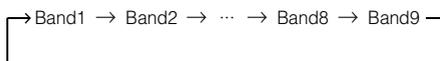
- *You can select a band directly by touching the screen.*

Adjusting the Frequency

Touch [◀] or [▶] of "Freq." to adjust the frequency of the selected band.

Adjustable frequency bands: 20 Hz to 20 kHz (in 1/3 octave steps)

> Band1: 20 Hz~100 Hz (63 Hz)
> Band2: 63 Hz~315 Hz (125 Hz)
> Band3: 125 Hz~500 Hz (250 Hz)
> Band4: 250 Hz~1 kHz (500 Hz)
> Band5: 500 Hz~2 k (1 kHz)
> Band6: 1 kHz~4 kHz (2 kHz)
> Band7: 2 kHz~7.2 kHz (4 kHz)
> Band8: 5.8 kHz~12 kHz (8 kHz)
> Band9: 9 kHz~20 kHz (16 kHz)

Adjusting the Level

Touch [▼] or [▲] of "Level" to adjust the level of selected band.

Setting contents: -7 to +7 (Initial setting: 0)

Setting the Bandwidth

Touch [◀] or [▶] of "Q Adjust" to select the bandwidth.

Setting contents: Wide (Initial setting) / Medium / Narrow

2 To adjust another band, repeat step 1, and adjust all bands.

3 To store the adjusted setting value, touch and hold **[Preset1]**, **[Preset2]**, or **[Preset3]** for at least 2 seconds.

- *Band2 and Band8 are the same as the Bass and Treble controls.*
- *Settings exceeding the frequency of adjacent bands are not available.*
- *While adjusting the Parametric EQ, you should consider the frequency response of the connected speakers.*
- *When the parametric EQ is adjusted, the Equalizer Presets are set to "User" automatically.*
- *When Equalizer Presets is set, the linked Parametric EQ settings are also changed. We recommend storing Parametric EQ settings in a Preset in advance.*
- *Touch [Flat] to initialize all values.*
- *The Parametric EQ setting can be configured when Defeat is "Off".*

Calling the Parametric EQ adjusted value

Calling the preset Parametric EQ adjusted value.

Touch [Preset1], [Preset2], or [Preset3] on the Parametric EQ screen.
The setting stored in the Preset will be recalled.

Adjusting the Crossover Settings (X-OVER)

Before performing the following procedures, refer to "About the Crossover" (page 29).

Setting item: X-OVER

1 **Touch [Channel] to select the channel.**
Each time you touch, the channel switches.
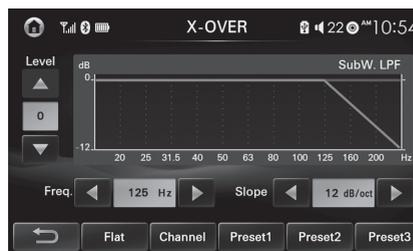
▌ 2WAY System
Front HPF/Rear HPF/Subw. LPF

▌ 3WAY System
Subwoofer (LPF)/Front Low (HPF)/Front Low (LPF)/Front High (HPF)

- *If you want to switch the 2WAY/3WAY system mode, please contact your dealer.*

2 **Touch [◀]/[▶] or [▲]/[▼] to adjust the desired item.**

Selecting the Cut-Off Frequency (Freq.)

▌ 2WAY System

Setting contents:

> *Front HPF/Rear HPF/Subw. LPF*
> 20 / 25 / 31.5 / 40 / 50 / 63 / 80 (Initial setting) / 100 / 125 / 160 / 200 (Hz)

▌ 3WAY System

Setting contents:

> *Subwoofer (LPF)/Front Low (HPF):*
> 20 / 25 / 31.5 / 40 / 50 / 63 / 80 / 100 / 125 / 160 / 200 / 250 / 315 / 400 / 500 (Initial setting) / 630 / 800 (Hz)

> *Front Low (LPF):*
> 20 / 25 / 31.5 / 40 / 50 / 63 / 80 / 100 / 125 / 160 / 200 / 250 / 315 / 400 / 500 / 630 / 800 / 1 k / 1.2 k / 1.6 k / 2 k / 2.5 k / 3.2 k / 4 k / 5 k (Initial setting) / 6.3 k / 8 k / 10 k / 12.5 k / 16 k / 20 k (Hz)

> *Front High (HPF):*
> 1 k / 1.2 k / 1.6 k / 2 k /2.5 k / 3.2 k / 4 k / 5 k (Initial setting) / 6.3 k / 8 k / 10 k / 12.5 k / 16 k / 20 k (Hz)

- *The frequency of Front Low (HPF) should not be more than the frequency of Front Low (LPF).*

Adjusting the Slope (Slope)

Setting contents:
> 0 / 6 / 12 / 18* / 24* (dB/oct.)

* *Not available when "Front Low (LPF)" is selected in 3WAY System.*
- *The initial setting for 2WAY is 0. 3WAY is 12.*
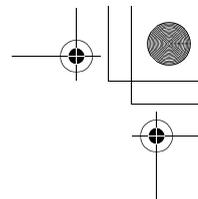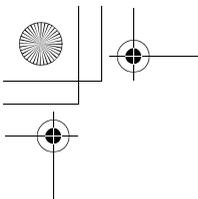
Adjusting the Level (Level)

Setting contents:
-12 to 0 (dB) (Initial setting: 0)

3 **Repeat steps 1 to 2 to make adjustment to the other channels.**

Note
- *The level setting results for Front Low (HPF) and Front Low (LPF) in 3WAY system are linkage.*

4 **To store the adjusted setting value, touch and hold [Preset1], [Preset2], or [Preset3] for at least 2 seconds.**

- *Touch [Flat] to set Level and Slope to 0. When 3 WAY system is selected, Depending on the response characteristics of the speaker, care should be taken when setting the response slope to 0, as speaker damage may result. With this unit, a message is displayed when the response slope for the high range speaker is set to 0.*
- *If the Subwoofer setting is "Off", the Subwoofer setting cannot be edited (refer to page 24).*
- *While adjusting the X-OVER you should consider the frequency response of the connected speakers.*

Calling the X-OVER adjusted value

Calling the preset X-OVER adjusted value.

Touch [Preset1], [Preset2], or [Preset3] on the X-OVER screen.
The setting stored in the Preset will be recalled.

Adjusting the Time Correction (Time Correction)

Before performing the following procedures, refer to "About Time Correction" (page 27).

Setting item: Time Correction

1 **Touch [cm], [inch] or [ms] to select mode for making adjustments.**
Each time you touch, the onscreen button and correction mode changes.
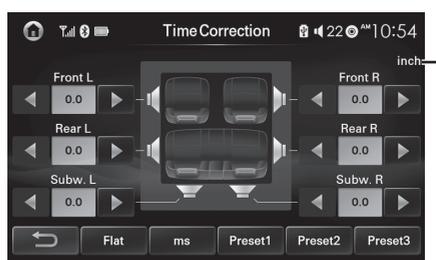
cm/inch: Adjust listening position and distance from each speaker.
ms: Adjust time.

2 **Touch [◄] or [►] for each speaker to adjust the time or distance.**
0.0 msec to 9.9 msec (0.1 msec/step)
0.0 cm (0.0 inch) to 336.6 cm (132.7 inch) (3.4 cm/step)
All speaker setting values are adjustable in the range of 15 ms or 510 cm.

3 **To store the adjusted setting value, touch and hold [Preset1], [Preset2], or [Preset3] for at least 2 seconds.**

- *Touch [Flat] to set all values to 0.0.*
- *If the Subwoofer setting is "Off", the Subwoofer setting cannot be edited (refer to page 24).*

Calling the Time Correction Value

Calling the pre-set time correction value.

Touch [Preset1], [Preset2], or [Preset3] on the time correction screen.
The setting stored in the Preset will be recalled.

Setting Defeat

If Defeat is "On", Bass Level, Treble Level, MX, Equalizer Presets and Parametric EQ functions are turned OFF. This disables any settings made for these functions.

Setting item: Defeat
Setting contents: Off (Initial setting) / On

Key Sound Setting

This function will give audible feedback when a button is touched.

Setting item: Key Sound
Setting contents: Off/On (Initial setting)

Initializing the Sound Setup

You can initialize all data of Sound setup to restore the factory setting.

Setting item: Restore Default Setting

1 **Touch [Restore Default Setting].**

2 **After the confirmation message appears, touch [OK].**
The Sound settings starts initialization.

- *Touching [Cancel] will cancel the setting.*

About Time Correction

The distance between the listener and the speakers in a car vary widely due to the complex speaker placement. This difference in the distances from the speakers to the listener creates a shift in the sounds image and frequency characteristics. This is caused by the time delay between the sound reaching the listener's right versus the left ear.
To correct this, this unit is able to delay the audio signal to the speakers closest to the listener. This effectively creates a perception of increased distance for those speakers. The listener can be placed at an equal distance between the left and right speakers for optimum staging.
The adjustment will be made for each speaker in 3.4 cm steps.

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Example 1. Listening Position: Front Left Seat

Adjust the time correction level of the front left speaker to a high value and the rear right to zero or a low value.
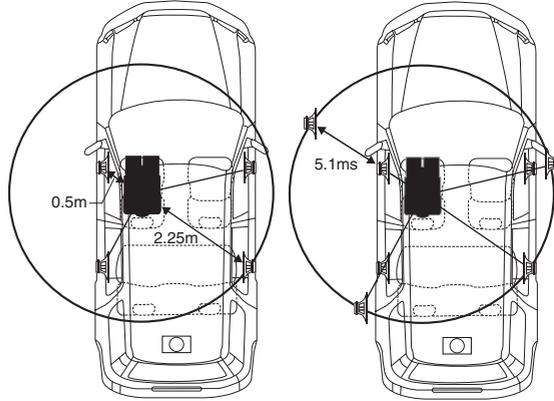
The sound is not balanced because the distance between the listening position and the various speakers is different.
The difference in distance between the front left speaker and the rear right speaker is 1.75 m (68-7/8").
Here we calculate the time correction value for the front left speaker in the diagram on the above.

Conditions:
Farthest Speaker – listening position : 2.25 m (88-9/16")
Front left speaker – listening position : 0.5 m (19-11/16")
Calculation: L = 2.25 m – 0.5 m = 1.75 m (68-7/8")
Time correction = 1.75 ÷ 343* × 1,000 = 5.1 (ms)

* *Speed of sound: 343 m/s (765 mph) at 20°C*

In other words, giving the front left speaker a time correction value of 5.1 ms makes it seem as if its distance from the listener is the same as the distance to the farthest speaker.

Time correction eliminates the differences in the time required for the sound to reach the listening position.
The time of the front left speaker is corrected by 5.1 ms so that its sound reaches the listening position at the same time as the sound of other speakers.

Example 2. Listening Position: All Seats

Adjust the time correction level of each speaker to almost the same level.

1 **Sit in the listening position (driver's seat, etc.) and measure the distance (in metres) between your head and the various speakers.**

2 **Calculate the difference between the distance correction value to the farthest speaker and the other speakers.**

L = (distance to farthest speaker) – (distance to other speakers)

These values are the time correction values for the different speakers. Setting these values to make each sound reach the listening position at the same time as the sound of other speakers.

Time Correction Value List

Time Difference (msec)	Distance (cm)	Distance (inch)	Time Difference (msec)	Distance (cm)	Distance (inch)
0.0	0.0	0.0	5.1	173.4	68.3
0.1	3.4	1.3	5.2	176.8	69.7
0.2	6.8	2.7	5.3	180.2	71.0
0.3	10.2	4.0	5.4	183.6	72.4
0.4	13.6	5.4	5.5	187.0	73.7
0.5	17.0	6.7	5.6	190.4	75.0
0.6	20.4	8.0	5.7	193.8	76.4
0.7	23.8	9.4	5.8	197.2	77.7
0.8	27.2	10.7	5.9	200.6	79.1
0.9	30.6	12.1	6.0	204.0	80.4
1.0	34.0	13.4	6.1	207.4	81.7
1.1	37.4	14.7	6.2	210.8	83.1
1.2	40.8	16.1	6.3	214.2	84.4
1.3	44.2	17.4	6.4	217.6	85.8
1.4	47.6	18.8	6.5	221.0	87.1
1.5	51.0	20.1	6.6	224.4	88.4
1.6	54.4	21.4	6.7	227.8	89.8
1.7	57.8	22.8	6.8	231.2	91.1
1.8	61.2	24.1	6.9	234.6	92.5
1.9	64.6	25.5	7.0	238.0	93.8
2.0	68.0	26.8	7.1	241.4	95.1
2.1	71.4	28.1	7.2	244.8	96.5
2.2	74.8	29.5	7.3	248.2	97.8
2.3	78.2	30.8	7.4	251.6	99.2
2.4	81.6	32.2	7.5	255.0	100.5
2.5	85.0	33.5	7.6	258.4	101.8
2.6	88.4	34.8	7.7	261.8	103.2
2.7	91.8	36.2	7.8	265.2	104.5
2.8	95.2	37.5	7.9	268.6	105.9
2.9	98.6	38.9	8.0	272.0	107.2
3.0	102.0	40.2	8.1	275.4	108.5
3.1	105.4	41.5	8.2	278.8	109.9
3.2	108.8	42.9	8.3	282.2	111.2
3.3	112.2	44.2	8.4	285.6	112.6
3.4	115.6	45.6	8.5	289.0	113.9
3.5	119.0	46.9	8.6	292.4	115.2
3.6	122.4	48.2	8.7	295.8	116.6
3.7	125.8	49.6	8.8	299.2	117.9
3.8	129.2	50.9	8.9	302.6	119.3
3.9	132.6	52.3	9.0	306.0	120.6
4.0	136.0	53.6	9.1	309.4	121.9
4.1	139.4	54.9	9.2	312.8	123.3
4.2	142.8	56.3	9.3	316.2	124.6
4.3	146.2	57.6	9.4	319.6	126.0
4.4	149.6	59.0	9.5	323.0	127.3
4.5	153.0	60.3	9.6	326.4	128.6
4.6	156.4	61.6	9.7	329.8	130.0
4.7	159.8	63.0	9.8	333.2	131.3
4.8	163.2	64.3	9.9	336.6	132.7
4.9	166.6	65.7			
5.0	170.0	67.0			

About the Crossover

Crossover (X-OVER):

This unit is equipped with an active crossover. The crossover limits the frequencies delivered to the outputs. Each channel is controlled independently. Thus, each speaker pair can be driven by the frequencies for which they have been optimally designed.
The crossover adjusts the HPF (high pass filter) or LPF (low pass filter) of each band, and also the slope (how fast the filter rolls off the highs or lows).
Adjustments should be made according to the reproduction characteristics of the speakers. Depending on the speakers, a passive network may not be necessary. If you are unsure about this point, please consult your authorized Alpine dealer.

2WAY mode

	Cut-off frequency (1/3 octave steps)		Slope		Level
	HPF	LPF	HPF	LPF	
Front high range speaker	20 Hz - 200 Hz	----	FLAT, 6, 12, 18, 24 dB/oct.	----	0 to -12 dB
Rear high range speaker	20 Hz - 200 Hz	----	FLAT, 6, 12, 18, 24 dB/oct.	----	0 to -12 dB
Subw. Low range speaker	----	20 Hz - 200 Hz	----	FLAT, 6, 12, 18, 24 dB/oct.	0 to -12 dB

Low range   High range

(Different from actual display)
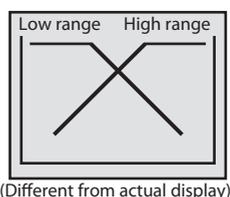
3WAY mode

	Cut-off frequency (1/3 octave steps)		Slope		Level
	HPF	LPF	HPF	LPF	
Front High range speaker	1 kHz - 20 kHz*	----	FLAT, 6, 12, 18, 24 dB/oct.	----	0 to -12 dB
Front Low range speaker	20 Hz - 800 Hz	20 Hz - 20 kHz	FLAT, 6, 12, 18, 24 dB/oct.	FLAT, 6, 12 dB/oct.	0 to -12 dB
Subw. Low range speaker	----	20 Hz - 800 Hz	----	FLAT, 6, 12, 18, 24 dB/oct.	0 to -12 dB

* Depending on the response characteristics of the speaker, care should be taken when setting the response slope of the high range speaker to 0 in 3WAY mode, as speaker damage may result (page 26).

Subw. Low range   Front Low range   Front High range

(Different from actual display)

Level adjusting (0 to –12 dB)
Output frequency range
Slope FLAT
Slope adjusting
20 Hz
(Different from actual display)
HPF cut-off frequency
LPF cut-off frequency
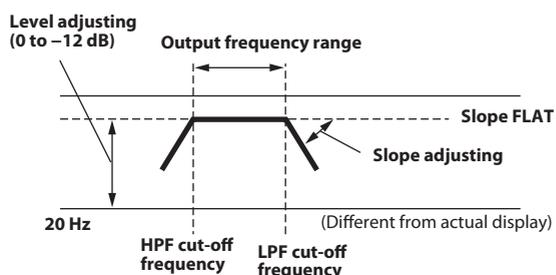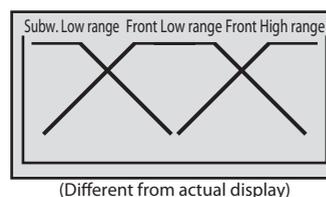
Notes

- If you want to switch the 2WAY/3WAY system mode, please contact your dealer.
- HPF (high pass filter): Cuts the lower frequencies and allows the higher frequencies to pass.
- LPF (low pass filter): Cuts the higher frequencies and allows the lower frequencies to pass.
- Slope: The level change (in dB) for a frequency change of one octave.
- The higher the slope value, the steeper the slope becomes.
- Adjust the slope to 0 to bypass the HP or LP filters.
- Do not use a tweeter without the HPF on or set to a low frequency, as it may cause damage to the speaker due to the low frequency content.
- You cannot adjust the crossover frequency higher than the HPF or lower than the LPF.
- Adjustment should be made according to the recommended crossover frequency of the connected speakers. Determine the recommended crossover frequency of the speakers. Adjusting to a frequency range outside that recommended may cause damage to the speakers.
  For the recommended crossover frequencies of Alpine speakers, refer to the respective Owner's Manual.
  We are not responsible for damage or malfunction of speakers caused by using the crossover outside the recommended value.

Disc Setup

Disc Setup Operation

> The following steps 1 to 4 are common operations to each
> "Setting item" of Disc Setup. Refer to each section for details.

1 Touch **[Setup]** icon on the Home screen.
The Setup main screen is displayed.

2 Touch **[Disc]**.
The Disc Setup screen appears.

3 Select the desired item and change the setting.
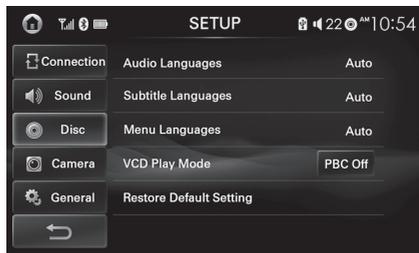
Setting items: Audio Languages*/Subtitle Languages*/Menu
Languages*/VCD Play Mode/Restore Default
Setting

* *Touch [▪] before performing these settings in DVD video mode.*

4 Touch **[↩]** to return to the previous screen.

Changing the language setting

The audio language, subtitle language and menu language can be set
according to your preferences.
Once set, this becomes the default language. This function is convenient
if you always want to listen in English, for example. (The language
setting is not effective on some discs. In this case, the default language
is set at the factory.)

* *When the settings are changed, old settings are overwritten. Make a*
  note of the current settings before making changes.
* *To temporarily change the language of the current disc, either do so*
  from the DVD menu or by using the operation described in the
  section "Switching the Audio Tracks" (page 20).
* *If the disc does not include the selected language, the disc's default*
  language is set.

To play in a language other than those displayed

1 Touch [Audio Languages], [Subtitle Languages] or [Menu
Languages].
2 Touch [Others].
The numeric keypad screen is displayed.
3 Touch the 4-digit numeral of the language number.
To reference language numbers, refer to "List of
Language Codes" (page 47).
4 Touch [Enter] to memorize the number.

Setting of the Audio Language

Set the audio language produced from the speakers.

Setting item: Audio Languages
Setting contents: Auto (Initial setting)/English/French/Japanese/
Italian/German/Swedish/Spanish/Chinese/
Russian/Others

* *When "Auto" is selected, the primary audio language among the*
  recorded ones is applied.
* *Depending on the disc, language may not be set successfully.*

Setting of the Subtitle Language

Set the language of the subtitles displayed on the screen.

Setting item: Subtitle Languages
Setting contents: Auto (Initial setting)/Off/English/French/
Japanese/Italian/German/Swedish/Spanish/
Chinese/Russian/Others

* *When "Auto" is selected, the primary subtitle language among the*
  recorded ones is applied.
* *Depending on the disc, language may not be set successfully.*

Setting of the Menu Language

Set the language used for the menus (title menu, etc.).

Setting item: Menu Languages
Setting contents: Auto (Initial setting)/English/French/Japanese/
Italian/German/Swedish/Spanish/Chinese/
Russian/Others

* *When "Auto" is selected, the primary menu language among the*
  recorded ones is played.
* *Depending on the disc, language may not be set successfully.*

Setting the Video CD Play Mode

When playing a Playback Control (PBC) enabled Video CD, you can
choose to set PBC On or Off.

Setting item: VCD Play Mode
Setting contents: PBC Off/PBC On (Initial setting)

PBC Off: The PBC menu is not displayed.
PBC On: The PBC menu is displayed.

Initializing the Disc Setup

You can initialize all data of Disc setup to restore the factory setting.

Setting item: Restore Default Setting

1 Touch **[Restore Default Setting]**

2 After the confirmation message appears, touch
[OK].
The Disc settings starts initialization.

* *Touching [Cancel] will cancel the setting.*

Connection Setup

Connection Setup Operation

> The following steps 1 to 4 are common operations to each "Setting item" of Connection Setup. Refer to each section for details.

1 Touch **[Setup]** icon on the Home screen.
The Setup main screen is displayed.

2 Touch **[Connection]**.
The Connection Setup screen appears.

3 Select the desired item and change the setting.

Setting items: Bluetooth Set/Bluetooth Device List/Restore Default Setting

4 Touch **[⬑]** to return to the previous screen.

BLUETOOTH Setting

Setting item: Bluetooth Set
Setting contents: Off / On (Initial setting)

Off: BLUETOOTH function is not used.
On: Select when you would like to pair your BLUETOOTH compatible phone with this unit.

• *If the Bluetooth setting is "Off", "Bluetooth Device List" setting item is not available.*

Connecting a BLUETOOTH Device

You can connect, disconnect, add or delete the Bluetooth compatible device on the Bluetooth Device List screen.

Connecting a new Bluetooth Device

1 Touch **[Bluetooth Device List]**.

2 Touch **[Add Device]**.
A message pops up "Search for "Alpine receiver" on your mobile phone. BT Password: 0000".

3 Search the Bluetooth Device from your mobile phone and then select "Alpine receiver".

4 **BT Password will display on the unit, input the password on your mobile phone to connect.**
If the connection is successful, "Connected" will be displayed.

• *When a Bluetooth Device is connected successfully, it will be stored as a registered device automatically. You can register 6 devices but only one device can be connected. If all 6 devices have been registered, you cannot register a 7th device. To register another device, you need to delete one of the 6 devices first.*
• *When the connection is completed, the connected Bluetooth Device will be displayed on the first line, and the 🎵 (Audio) and/or 📱 (Phone) icon are highlighted.*
• *When there is a connected Bluetooth Device currently, a message will display if you touch [Add Device]. Touch [OK] to disconnect the current device or touch [Cancel] to return to device list screen.*
• *Depending on the mobile phone, the password may display on your mobile phone directly. Check the password and accept the pair request.*
• *Depending on the Bluetooth version, the password displays on the unit may be different.*
• *The default Model Name of this unit is "Alpine receiver". You can change it according to your own preferences. For details, please refer to "Displaying the Product Information" on page 23.*

Connecting a registered BLUETOOTH Device

Select one of 6 BLUETOOTH compatible devices that you previously registered.

1 Touch **[Bluetooth Device List]**.

2 Touch **[Connect]** of the device you want to connect from the Registered Device list.

Disconnecting a BLUETOOTH Device

You can disconnect the current connected BLUETOOTH Device.

1 Touch **[Bluetooth Device List]**.

2 Touch **[Disconnect]**.

3 Touch **[OK]**.

• *Touching [Cancel] will cancel the setting.*

Deleting a Registered BLUETOOTH Device from the list

You can delete the information of a previously connected BLUETOOTH compatible device.

1 Touch **[Bluetooth Device List]**.

2 Touch **[Delete]** of the BLUETOOTH compatible device to delete from the Device list.

3 Touch **[OK]**.

• *Touching [Cancel] will cancel the setting.*

Clearing the BLUETOOTH Device List

You can delete the information of all the previously connected
BLUETOOTH compatible devices.

1 Touch **[Bluetooth Device List]**.

2 Touch **[Clear]** to delete all the previously connected
BLUETOOTH compatible device from the list.

3 Touch **[OK]**.

• *Touching [Cancel] will cancel the setting.*

Initializing the Connection Setup

You can initialize all data of Connection setup to restore the factory
setting.

Setting item: Restore Default Setting

1 Touch **[Restore Default Setting]**.

2 After the confirmation message appears, touch
[OK].
The Connection settings starts initialization.

• *Touching [Cancel] will cancel the setting.*

Camera Setup

Camera Setup Operation

With an optional camera connected, its video is output to the monitor.
When the camera is connected, set this item.

> The following steps 1 to 4 are common operations to each
> "Setting item" of Camera Setup. Refer to each section for
> details.

1 Touch **[Setup]** icon on the Home screen.
The Setup main screen is displayed.

2 Touch **[Camera]**.
The Camera Setup screen appears.

3 Select the desired item and change the setting.
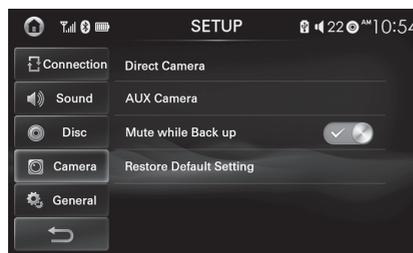
*Setting items: Direct Camera / AUX Camera / Mute while Back
up / Restore Default Setting*

4 Touch [ ] to return to the previous screen.

Direct Camera Setting

[Direct Camera] is selected on the Camera setup menu in step 3.
Refer to "Camera Setup Operation" (page 32).

Setting the Camera Input

Setting item: Camera Select
Setting contents: Rear*/Top View/Off (Initial setting)

Rear: Rear camera
Top View: Top View camera
Off: No camera is used

* *If "Camera Select" in AUX Camera Setting is set to "Rear", "Rear"
cannot be set in Direct Camera Setting.*

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Direct Rear View Camera Operation

When an Alpine Direct Rear View Camera is connected and "Rear" is selected in "Camera Select", the settings below can be performed. For more information about Alpine Direct Rear View Camera, please consult your Alpine dealer.

Adjusting the Guide

Setting item: Guide Adjustment*
* Displays only when "Camera Select" is set to "Rear".

Switching video patterns for Rear camera

1 Touch [Guide Adjustment].
The camera guide adjustment screen is displayed.

2 Touch [Rear], [Panorama], [Corner] or [Ground].
The view will change to the selected view.

3 Touch [⤺] to return to the previous screen.

• *For an explanation of video patterns, see the camera Owner's Manual.*

Adjusting the Rear Camera Guide

If you select "Rear", you can adjust the camera guide position.

1 Touch [Guide Adjustment].
The camera guide adjustment screen is displayed.
• *The camera guide is displayed only when the video pattern is set to "Rear".*

2 Touch [Adjust].
• *If [Adjust] does not appear, proceed to step 3.*

3 Touch the guide you intend to adjust.
Guide line can also be selected by touching [▲] [▼].

Display example for rear camera mode
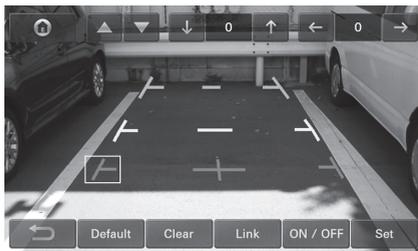
4 Touch [↑], [↓], [←] or [→] to adjust the position of the guide.
  • *Touching [Clear] clears adjustments and returns to the setting before guide line alteration.*

5 After the adjustment is completed, touch [Set].

■ **Adjusting guides simultaneously (for Rear camera only)**

1 Touch [Link].
The 3 vertical guides of the currently-selected guide link together, allowing them to be adjusted simultaneously.
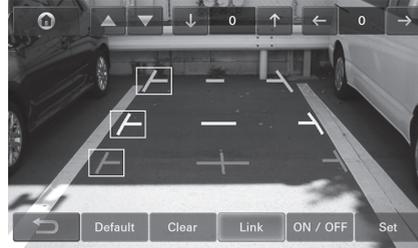
■ **Turning guide display On/Off**

Turning the selected guide off.

1 Touch [On/Off].
The currently selected guide will turn off.

2 To turn the guide on, touch [On/Off] again.

• *Guides that are turned off are still adjustable.*

■ **Returning guides to default.**

1 Touch [Default].
A message window will appear.

2 Touch [OK].
Adjusted values will return to default settings.

Setting the Direct Camera Signal Input

The video input signal type can be chosen.

Setting item: Camera Signal
Setting contents: NTSC (Initial setting)/PAL

Camera Interrupt Setting (Power Mode)

You can set whether to display the rear camera image when the gear lever is moved to the reverse (R) position while the unit is turned off.

Setting item: Camera Interrupt (Power Mode)
Setting contents: On (Initial setting) /Off

On: The rear camera image is displayed when the gear lever is moved to the reverse (R) position while the unit is turned off

Off: The rear camera image is not displayed

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Direct Top View Camera Operation

When an Alpine Direct Top View Camera is connected and "Top View" is selected in "Camera Select", the settings below can be performed. For more information about Alpine Direct Top View Camera, please consult your Alpine dealer.

Setting the Direct Camera Signal Input

The video input signal type can be chosen.

Setting item: Camera Signal
Setting contents: NTSC (Initial setting)/PAL

Adjusting the Top View Camera

If you select "Top View", you can make the adjustment of Top View camera.

Setting item: Top View Camera Adjustment
Further setting item: Factory Calibration/Screen Alignment
***   Adjust/Version Information***

- *For details about these settings, please refer to the Owners' Manual of Top View camera.*

AUX Camera Setting

[AUX Camera] is selected on the Camera setup menu in step 3. Refer to "Camera Setup Operation" (page 32).

Setting the Camera Input

Setting item: Camera Select
Setting contents: Rear*/Side/off (Initial setting)

Rear: Rear camera
Side: Side camera

* *If "Camera Select" in Direct Camera Setting is set to "Rear", "Rear" cannot be set in AUX Camera Setting.*

AUX Rear View Camera Operation

When an AUX Rear View Camera is connected and "Rear" is selected in "Camera Select", the settings below can be performed. For more information about AUX Rear View Camera, please consult your Alpine dealer.

Setting the AUX Camera Signal Input

The video input signal type can be chosen.

Setting item: Camera Signal
Setting contents: NTSC (Initial setting)/PAL

Adjusting the Guide

Setting item: Guide Adjustment*

* *Displays only when "Camera Select" is set to "Rear".*

Adjusting the Rear Camera Guide

If you select "Rear" you can adjust the camera guide position.

1   Touch **[Guide Adjustment]**.
The camera guide adjustment screen is displayed.

2   Touch **[Adjust]**.
- *If [Adjust] does not appear, proceed to step 3.*

3   Touch the guide you intend to adjust.
Guide line can also be selected by touching [▲] [▼].
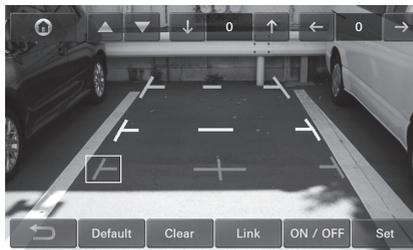
4   Touch **[↑]**, **[↓]**, **[←]** or **[→]** to adjust the position of the guide.
- *Touching [Clear] clears adjustments and returns to the setting before guide line alteration.*

5   After the adjustment is completed, touch **[Set]**.

■   **Adjusting guides simultaneously (for Rear camera only)**

Touch **[Link]**.
The 3 vertical guides of the currently-selected guide link together, allowing them to be adjusted simultaneously.
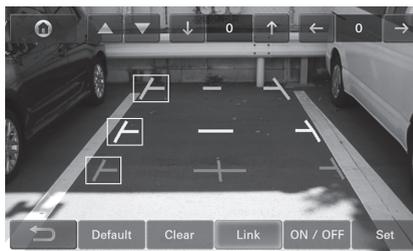
■ Turning guide display On/Off

Turning the selected guide off.

1 Touch **[On/Off].**
The currently selected guide will turn off.

2 To turn the guide on, touch **[On/Off]** again.

- *Guides that are turned off are still adjustable.*

Returning guides to default.

1 Touch **[Default].**
A message window will appear.

2 Touch **[OK].**
Adjusted values will return to default settings.

AUX Side View Camera Operation

When an AUX Side View Camera is connected and "Side" is selected in "Camera Select", the settings below can be performed. For more information about AUX Side View Camera, please consult your Alpine dealer.

Setting the AUX Camera Signal Input

The video input signal type can be chosen.

Setting item: Camera Signal
Setting contents: NTSC (Initial setting)/PAL

Reverse Mute Setting

You can set whether to mute the playing music when the gear lever is moved to the reverse (R) position.

Setting item: Mute while Back up
Setting contents: Off / On (Initial Setting)

On: The playing music is muted when the gear lever is moved to the reverse (R) position.
Off: Continue playing music even though the gear lever is moved to the reverse (R) position.

Initializing the Camera Setup

You can initialize all data of Camera setup to restore the factory setting.

Setting item: Restore Default Setting

1 Touch **[Restore Default Setting].**

2 After the confirmation message appears, touch **[OK].**
The Camera settings starts initialization.

- *Touching [Cancel] will cancel the setting.*

BLUETOOTH Operation

Before Using BLUETOOTH

- *Depending on the BLUETOOTH version, a BLUETOOTH compatible device may not be able to communicate with this unit.*
- *Proper function of this unit with all BLUETOOTH compatible devices is not guaranteed. For handling of the BLUETOOTH compatible device, consult your ALPINE dealer or ALPINE website.*
- *Depending on the connected BLUETOOTH compatible device(s), the function may differ. Also refer to the Owner's Manual of the connected device(s).*

Connecting a BLUETOOTH Device

Before using the hands-free phone/audio function, the following settings need to be made.

1 Set "Bluetooth Set" to "On" (see page 31).

2 Connect a BLUETOOTH device in this unit (see page 31).

- *Refer to "BLUETOOTH Setting" (page 31).*

Hands-Free Phone Control

Display example for Phone menu screen
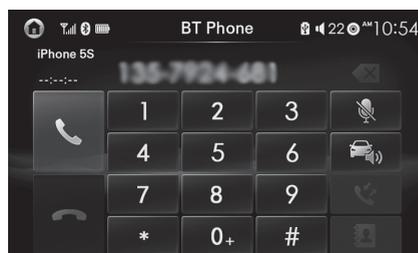
① Phonebook key: Enter Phonebook screen
② Call History key: Enter Call History screen
③ Voice Output Switch key: Switch the voice output for calls between car speaker and mobile phone.
④ Dial key
⑤ Hang Up key

Answering a Call

Incoming calls are announced by the received call ring tone and a displayed message (PHONE No., etc.).

1 **An incoming call triggers the ringtone and an incoming call display.**

2 **Touch [📞] or press ☎ (PHONE) button.**
The call starts.

- *During a call, the audio for the current mode on the unit is muted. After calling, playback will resume.*
- *When the caller's number is transmitted to the system, if the caller's name is stored in the phone book, the name is displayed. If the name is not stored, the number is displayed. When neither the name or the number is unavailable, "Unknown" is displayed.*

Hanging up the Telephone

Touch [📞].
The call finishes.

Calling

Use the Phone menu screen to make a phone call.

Dialing a Number In Call History

You can use 3 types of history to make a phone call. Call History saves up to 60 phone numbers, (each type can save 20 phone numbers). If the limit is exceeded, the oldest phone number is deleted.

1 **Press the ☎ (PHONE) button.**
The phone menu screen is displayed.

2 **Touch [📞].**
The Call History screen is displayed.

3 **Touch [Dialled], [Received] or [Missed].**
The selected Call History list is displayed.
Touch [⬆] or [⬇] to change the page.

4 **Touch the name from the call history.**
- *Touching [Delete] deletes the select history.*
- *Touching [Clear] deletes all histories of the current type.*

5 **Touch [Call].**
The phone call is started.

Dialing a Number In the Phone Book

If your mobile phone supports Bluetooth phone book download protocol, the phone book will be transmitted to this unit when mobile phone connect to this unit.
You can use the phone book of the mobile phone to make a phone call.

1 **Press the ☎ (PHONE) button.**
The phone menu screen is displayed.

2 **Touch [👤].**

3 **Touch the person name or the telephone number from the Phone Book list.**

4 **Touch [Call].**
The phone call is started.

- *This unit can download up to 3000 numbers from the photo book of mobile phone (each person 3 numbers at most). If you update the photo book of your Mobile phone, it will not automatically sync to this unit until the next time Bluetooth connection is established.*
- *If a person have several numbers stored in phone book, touch [>>] to select desired number.*

Searching a Number from Phone Book

This unit support Phone Book Search function. You can find the desired person/number in the phone book by numeric or alphabetical index.

Display example for Phone Book Search screen
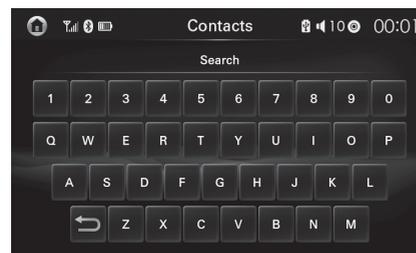
1 **Touch [Search] on Phone menu screen.**
The Phone Book Search screen is displayed.

2 **Input a name or phone number directly to make the search.**
- *Only 0-9 numbers and A-Z letters are supported.*
- *Depending on your mobile phone, the phone book displays on this unit may be different from the display on mobile phone. In this case, please consult your mobile phone dealer for more information.*

Entering a Phone Number to Make a Call

1 **Press the ☎ (PHONE) button.**
The phone menu screen is displayed.

2 **Enter the phone number you wish to call.**

3 **Touch [📞].**
The phone call is started.

Redial Function

You can redial the person you have previously called.

1 **Press the ☎ (PHONE) button.**
The phone menu screen is displayed.

2 **Touch [📞].**
The number is redialed.

Operations During a Conversation

Display example

① Phone number
② Conversation time

Adjusting the Incoming Volume

You can adjust the receive volume respectively.

Press ∧ or ∨ button to adjust incoming volume.

You can adjust the volume in 0 ~ 10 level. "5" is the initial level.

Changing the Voice Output

The voice output for calls is switchable between car speakers and the mobile phone speaker.

Touch [📢].

• *Depending on the mobile phone, this operation may not be possible.*

Stopping input to the microphone

If the surrounding sound (road noise,etc.) is loud, you may wish to cut input to the microphone.

Touch [🎤].

• *Touch again to cancel the mute mode.*

Phone Book Function

Display example for Phone Book screen
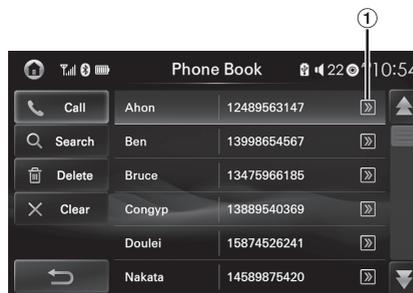
① An icon is displayed to indicate that multiple phone numbers are registered under an entry.

Deleting the Phone Book Entries

Deleting One Entry from the Phone Book

1 **Press the ☎ (PHONE) button.**
The Phone menu screen is displayed.

2 **Touch [👤].**
The Phone Book screen is displayed.

3 **Touch [Delete] of the phone number you intend to delete.**
The confirmation screen is displayed.
If multiple phone numbers are registered, they are all deleted.

4 **Touch [Yes].**
The selected number is deleted.

Deleting All Entries from the Phone Book

1 **Press the ☎ (PHONE) button.**
The Phone menu screen is displayed.

2 **Touch [👤].**
The Phone Book screen is displayed.

3 **Touch [Clear].**
The confirmation screen is displayed.

4 **Touch [Yes].**
All entries of the phone book are deleted.

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BLUETOOTH Audio

If a BLUETOOTH compatible mobile phone, portable player, etc. is connected by wireless, you can play back a song (operation is controllable from the unit).

Display example for BLUETOOTH Audio main screen
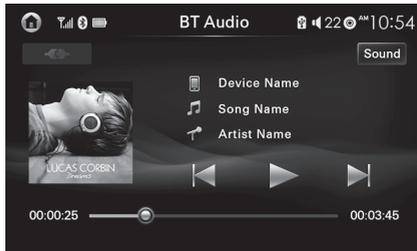
- *If there is no Bluetooth device connects to this unit, you can make the connection directly by touching [ ]. The Bluetooth device list screen is displayed. Please refer to "Connecting a BLUETOOTH Device" on page 31 to add a device.*
- *To play back audio, a mobile phone or a portable player conforming to A2DP (Advanced Audio Distribution Profile) or AVRCP (Audio/ Video Remote Control Profile) is required.*
  Not all functions work with all devices.
- *During a call, sound on the BLUETOOTH audio source is paused.*

Playback

1 **Press and hold 🚗 (CAR) button for at least 2 seconds to recall the Home screen.**

2 **Touch [BT Audio].**

3 **Touch [◄] or [►|] to select the desired track.**

4 **To pause playback, touch [❙❙].**
Touch [►] to resume playback.

Auxiliary Device (Optional)

Operating Auxiliary Devices (Optional)

To operate devices connected to the AUX RCA terminals or Mini Jack Connector of this unit, follow the procedure described below.

- *Set "Setting the AUX Mode" (page 23) to "AUX RCA" or "Mini Jack".*
- *Depending on the connected unit, the onscreen buttons may not work, or their operation may differ.*
- *If you try to activate the video screen while driving, the display will show the warning-For your safety, video playback is only available while the vehicle is parked.*

1 **Press and hold 🚗 (CAR) button for at least 2 seconds to recall the Home screen.**

2 **Touch [AUX].**
The AUX mode screen is displayed.

AUX Operation Screen Display During Video File Playback (AUX RCA Only)

1 **Touch the screen.**
The AUX operation screen is displayed.

Example for AUX Video mode display (AUX RCA Only)

- *The operation screen changes to the visual screen in the AUX mode for 5 seconds after an operation has been performed. To hide the AUX operation screen, touch the video display area.*

Touch the display panel to display the operation screen again.

2 **Touch [Wide] to change the display mode or touch [Sound] to set the sound.**
For more details, please refer to "Switching Display Modes" on page 18 and "Sound Setup" (page 24)

Operating the Mobile Digital TV Receiver (DVB-T)

To operate the Mobile Digital TV Receiver (DVB-T) (Optional), set "Setting the AUX Mode" (page 23) to "DVB-T".

Changing to the Mobile Digital TV Receiver (DVB-T) Mode

1 **Press and hold (CAR) button for at least 2 seconds to recall the Home screen.**

2 **Touch [DVB-T].**
The display shows the DVB-T mode screen.

About the DVB-T operation screen

When you touch the screen in the DVB-T mode, the operation screen is displayed. For details on how to operate, refer to the Owner's Manual of the connected Digital TV Receiver (DVB-T).

Menu operation mode screen display example

① [◀◀]
Switches the Channel number/favorite channel number down.
② [▶▶]
Switches the Channel number/favorite channel number up.
③ [Channel] or [Favorite]
Switches between the Channel mode and the favorite channel mode.
④ [EPG]
Call up the Electronic Programme Guide (EPG).
⑤ [Menu]
Call up the menu screen.
⑥ [Menu Control]
Call up the menu operation mode.
⑦ [A/V]
Switches the source.
⑧ [Scan]
Touch the switch to start the scan procedure.
⑨ [Wide]
Not available for DVB-T.

Camera Operation (Optional)

When an optional camera is connected, the view video of camera can be output to the monitor.
Rear camera, Top View camera or Side camera can be connected to this unit.
Depending on your camera, please choose the connection method (Direct or AUX) and camera type (Rear, Top View or Side) first. For details, refer to "Camera Setup" (page 32).
For more information about Alpine Camera, please consult your Alpine dealer.

You can adjust the quality of the camera image.
Setting items: Brightness/Contrast
Refer to "Visual Setting" (page 22).

Rear Camera Operation

Set "Rear" for "Direct Camera Setting" (page 32) or "AUX Camera Setting" (page 34).

Displaying the rear view video while the car is in reverse

1 **Shift the gear lever to the reverse (R) position.**
The rear view image is displayed while the car remains in reverse.

2 **If you shift the gear lever to a position other than reverse (R), the monitor returns to the previous screen.**

- *Never depend solely on the camera when backing up. Always turn and look and only use the camera for additional assistance.*
- *This function is effective when the reverse wire is properly connected.*
- *You can also display the view video of camera by pressing CAMERA button. If both Direct Camera (e.g. Rear camera) and AUX camera (e.g. Side camera) are connected, a camera selecting screen will display. You need to choose the camera first.*

39-EN
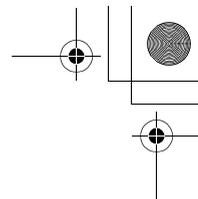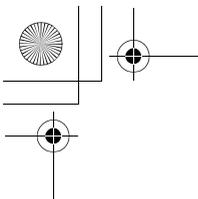
Switching the Image Pattern for the Rear Camera

If Direct Rear View camera is selected, you can switch the image pattern by this setting.

1 **Touch the screen when the image from the rear camera is displayed.**

The operation keys are displayed on the screen.
- *After a 5-second time-out, the operation screen returns to the camera display screen.*

2 **Touch [Rear], [Panorama], [Corner] or [Ground].**

The image pattern changes.
[Rear]:   Rear View
[Panorama]:   Panorama View
[Corner]:   Corner View
[Ground]:   Ground View

- *For detailed information about image patterns, see the camera Owner's Manual.*

Guide Display ON/OFF Setting

1 **Touch the screen when the image from the camera is displayed.**

The operation screen is displayed on the screen.
- *After a 5-second time-out, the operation screen returns to the camera display screen.*

2 **Touch [Guide OFF] on the Rear camera display screen.**

The guide disappears, and then the [Guide OFF] switch changes to [Guide ON].

3 **Touch [Guide ON] to turn on the guide.**

Adjusting the Caution Display Location

1 **Touch the screen when the image from the camera is displayed.**

The operation screen is displayed on the screen.
- *After a 5-second time-out, the operation screen returns to the camera display screen.*

2 **Touch [Caution ⬍].**

- *For each touch, the caution location moves to the top or bottom of the screen.*

About the Rear Camera Guide

To display the guide, set "Guide Display ON/OFF Setting" (page 40) to On. Also, to adjust the guide, refer to "Adjusting the Rear Camera Guide" (page 33). You can also turn off the guide in the Rear camera display screen.

■ **Indication mark meaning**

When the car is put into reverse gear, the monitor switches to the rear view camera image. Guides appear to help visualize the car's width and distance from the rear bumper.
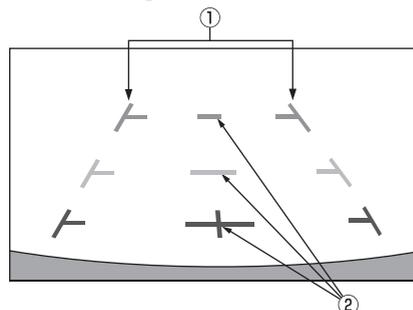
① **Car width extension marks (red, yellow and green in order of distance)**

If properly calibrated, the marks indicate the car's width. This helps guide the car's path when backing up in a straight line.

The marks represent the distance from the rear of the car (from the rear end of the bumper).
- The marks do not move in synchronization with the steering wheel.

② **Distance guidance marks**

The marks represent the distance from the rear of the car (from the rear end of the bumper).
- The marks do not move in synchronization with the steering wheel.
- Each centre position of the mark represents about 0.5 m (red), about 1 m (yellow) and about 2 m (green) behind.

- *Depending on the condition of the car or road surface, the range of vision may vary.*
- *The camera has a limited range of vision. Objects at extreme angles to the camera (e.g. under the bumper or at opposite ends of the bumper) may not be in the its field-of-vision.*
- *The rear camera image may have a tint which is different from the actual surroundings.*
- *Depending on the car, the guidance may deviate to the right or left. This is not a malfunction.*

40-EN
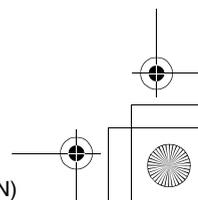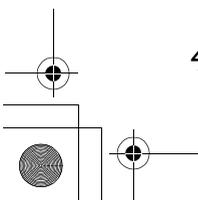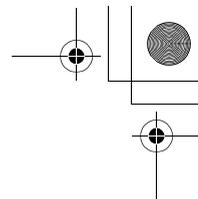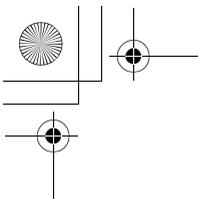
■ Distance guidance mark

The distance guides represent the ground level distance from the rear bumper. It is difficult to accurately estimate the distance to objects above ground level.

<Screen>

C
B
A (about 0.5 m)

<Positions of A, B and C>
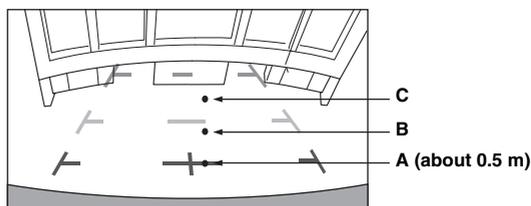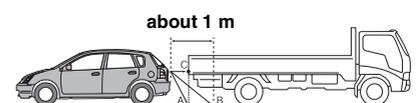
about 1 m

In the screen, according to the distance guidance marks, the truck seems to be parked about 1 m away (at the position B). In actual fact, however, if you reversed to position A, you would collide with the truck.
In the screen, positions A, B and C seem to be located in order of proximity. However, in actual fact, the position A and C are the same distance, and B is farther away than positions A and C.

- *The car width extension mark represents the distance to the road surface. The distance to an object on the road is not accurately represented by the guides.*
- *In the following conditions, screen visibility may be impaired. This is not a malfunction.*
    - *When it is dark (during the night, etc.).*
    - *Under very high or very low temperature conditions.*
    - *When water drops adhere to the camera, or when the humidity is high (such as rainy weather, etc.).*
    - *When foreign bodies (such as mud, etc.) adhere to the camera or its peripheral area.*
    - *When sunlight or headlights directly strike the camera lens.*
    - *When a CCD camera is connected, smearing* may occur. This phenomenon is peculiar to CCD cameras.*

- **** Smear phenomenon:***
    A phenomenon which occurs when a high-intensity spot (such as a reflection of the sunlight on a car body) is shot by the camera. The picture below is an example of 'vertical smear' common to CCD cameras.

A high-intensity spot
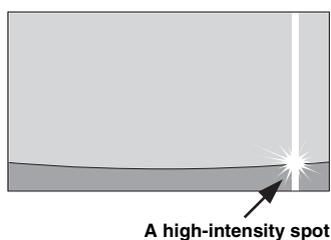
Error between the screen and the actual road surface

In the following conditions, errors are produced between the screen guidance and the actual road surface. (The illustrations represent a case when the camera is installed in the standard position.)

■ When there is a steep upward slope behind the car (example)

<Screen>

1.0m
0.5m

Distance guidance marks

<Situation of the car>

Actual distances

0.5m
1.0m

Error Error
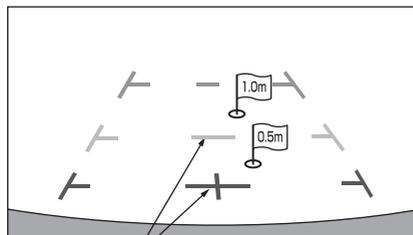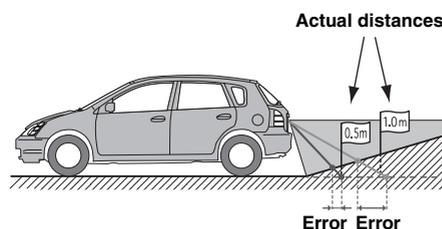
The distance guidance mark represents the distance to a flat road surface. Therefore in the case of an upward slope behind the car, the distance guides are displayed closer to the rear bumper than the actual distance. For example, if there is an obstacle on the upward slope, it may appear farther away than its actual position.
Also, an error may occur between the guidance and the actual path of the car on the road surface.

■ When there is a steep downward slope behind the car (example)

<Screen>

1.0m
0.5m

<Situation of the car>

0.5m
1.0m

Error   Error

41-EN
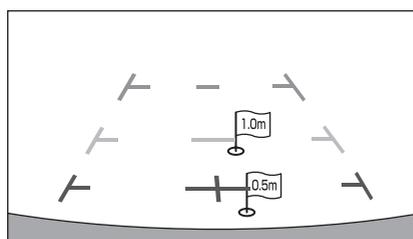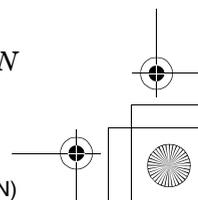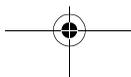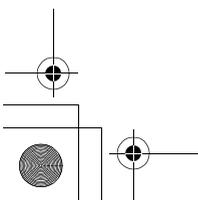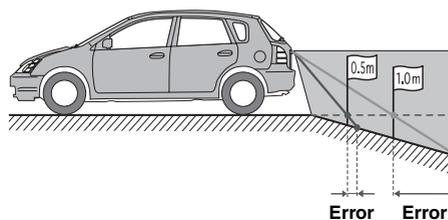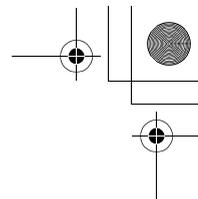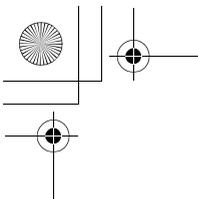
In the case of a downward slope behind the car, the distance guides are displayed farther from the rear bumper than the actual distance.
If there is an obstacle on the downward slope, it seems closer than its actual position.
Also, an error may occur between the guidance and the actual path of the car on the road surface.

Top View Camera Operation

Set "Top View" for "Direct Camera Setting" (page 32).
Pressing CAMERA button to display the view video of top view camera. If both Direct Camera (Top View camera) and AUX camera (e.g. Side camera) are connected, a camera selecting screen will display. You need to choose Top View camera first.

Adjusting the Caution Display Location

1 **Touch the screen when the image from the camera is displayed.**
The operation screen is displayed on the screen.
• *After a 5-second time-out, the operation screen returns to the camera display screen.*

2 **Touch [Caution ⬍].**

• *For each touch, the caution location moves to the top or bottom of the screen.*

Side Camera Operation

Set "Side" for "AUX Camera Setting" (page 34).
Pressing CAMERA button to display the view video of side camera. If both Direct Camera (e.g. Rear camera) and AUX camera (Side camera) are connected, a camera selecting screen will display. You need to choose Side camera first.

Adjusting the Caution Display Location

1 **Touch the screen when the image from the camera is displayed.**
The operation screen is displayed on the screen.
• *After a 5-second time-out, the operation screen returns to the camera display screen.*

2 **Touch [Caution ⬍].**

• *For each touch, the caution location moves to the top or bottom of the screen.*

USB Memory (Optional)

You can play back music files (MP3/WMA/AAC/WAV/FLAC), video files (WMV/MP4/AVI) and picture files (BMP/JPG) stored in a USB memory device on the internal player of this system. The priority type of file that is played is in turn: Music / Video / Picture

• *If you try to activate the video screen while driving, the display will show the warning-For your safety, video playback is only available while the vehicle is parked.*
• *The maximum capability of USB memory supported by this unit is 256 GB and the file system should be FAT 16/32.*
• *The USB HUB is not supported.*
• *If a USB memory with multiple partitions is connected to this unit, only the first partition is identified.*
• *Some files may not be supported according to the specification. Please consult your Alpine dealer for more information.*
• *The maximum total number of tracks supported by this unit is 9999.*

Display example for the USB main screen

Audio mode
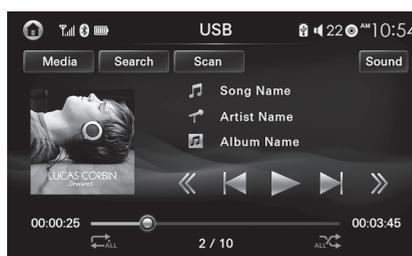
• *You can display artwork during USB playback.*

Video mode
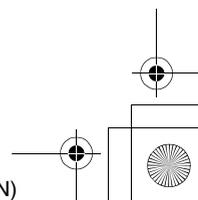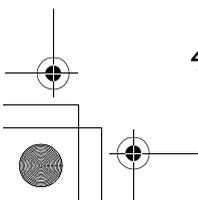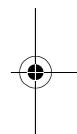
Picture mode
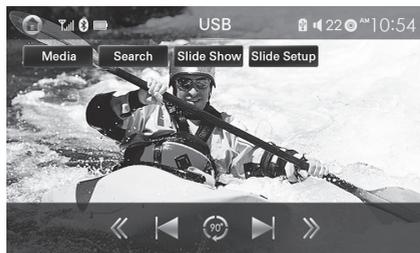
- *If there is no operation for 3 seconds in Video or Picture mode, full screen is displayed. Touch the screen will return to normal mode.*

Media types that can be used for each heading are represent by following marks.

Audio : Audio media can be used

Video : Video media can be used

Picture : Picture media can be used

Selecting the Media Type

Audio Video Picture

Touch [Media] to select the media type of the file you want to play.

Audio/Video/Picture

Playback Audio Video

1 Press and hold (CAR) button for at least 2 seconds to recall the Home screen.

2 Touch [USB].
The USB mode is activated and the display changes to the USB screen.

3 Touch [|◀] or [▶|] or to select the desired track (file).

Returning to the beginning of the current (or previous) track (file)*
Touch [|◀].
* *If a song is played more than 10 seconds, it will return to the beginning of the current song. Otherwise, it will jump to the previous song.*

Fast reverse :
Touch and hold [|◀] for at least 2 seconds.
Touch [|◀] to cancel Fast reverse and start playback.

Advancing to the beginning of the next track (file) :
Touch [▶|].

Fast forward :
Touch and hold [▶|] for at least 2 seconds.
Touch [▶|] to cancel Fast forward and start playback.

4 To pause playback, touch [‖].
Touch [▶] to start playback.

- *Fast reverse/Fast forward speed is 8 times faster than normal playback.*
- *You can also touch the progress bar to adjust the playback progress.*

Selecting Folders Audio Video Picture

Touch [≪] or [≫] to select the folder.

Scanning Song Audio

Touch [Scan] to activate the Scan mode.
Each song stored in the USB memory will be played back for 10 seconds. The Scan mode will stop automatically when all songs in the USB memory are scaned.

To stop scanning, touch **[Scan Off]** and the current song will be played back.

Repeat Play Audio Video

Touch [⇆] during playback.
The repeat mode switches every time the button is touched.

Repeat → Repeat → Repeat → Repeat
All   One   Folder*   All

* *Only files in a folder are repeatedly played back.*
- *If the Repeat One or Repeat Folder mode is activated during Random playback, the Random mode will be cancelled.*

## Random Play Audio Video

Touch [✕] during playback.
The tracks (files) on the disc will be played back in a random sequence.
To cancel the Random play, touch [✕].

Random → Random → Random
Off   Folder*   All

* *Only files in a folder are played back in random sequence.*

- *If the Random mode is activated during Repeat playback, the Repeat Play mode will be set to Repeat All automatically.*
- *If you select a track by using the search mode, the Random play mode will be cancelled.*

Searching for a Desired File

Audio Video Picture

By organizing songs by folder, you can quickly find a desired folder/file. This operation is similar to search a folder/file from PC.

1 Touch [Search].
The folder/file name list screen is displayed.

2 Touch the desired file/folder name.
If a file is selected, the file is played back.
If a folder is selected, the contents of this folder are displayed. Repeat step 2 until you find the desired file.

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Thumbnail search mode (Picture)

Touch [Thumbnail] in the picture file list search mode.
Picture files in the current list will be displayed in the form of a thumbnail.
Touch [List] will return to file list search mode.

- *To return to the previous hierarchy, touch [⬅].*

Picture operation (Picture)

Switching pictures

Touch [◄] or [►] in normal model to switch pictures.
In normal mode or full screen mode, You can also slide the screen left or right to switch pictures.

Slide Show

Touch [Slide Show] in normal mode to activate Slide Show play mode.
In Slide Show play mode, touch [❚❚] to pause and touch [►] to resume play.
Touch [⬅] will return to normal mode.

Setting the Slide Show time

1 **Touch [Slide Setup] to display the Slide Show time setting screen.**

2 **Touch [◄] or [►] to adjust the time interval between 1 to 15 seconds.**

3 **Touch [Done] to confirm.**

Rotating Picture

Touch [🔄] to rotate the picture 90 degrees clockwise.

iPod/iPhone (Optional)

An iPod/iPhone can be connected to this unit by using the Interface cable for iPod (included with iPod/iPhone).

About iPod/iPhone models usable with this unit

- The following devices have been tested and shown to work with this unit. Correct function of earlier versions cannot be guaranteed.
  iPod touch 6th generation 16GB/32GB/64GB/128GB: Ver.9.3.5
  iPod nano 7th generation 16GB: Ver.1.0.4
  iPod touch 5th generation 32GB/64GB: Ver.9.3.5

- The following devices have been tested and shown to work with this unit. Correct function of earlier versions cannot be guaranteed.
  iPhone 6S Plus 16GB/64GB/128GB: Ver.9.3.5
  iPhone 6S 16GB/64GB/128GB: Ver.9.3.5
  iPhone SE 16GB/64GB: Ver.9.3.5
  iPhone 6 Plus 16GB/64GB: Ver.9.3.5
  iPhone 6 16GB/64GB: Ver.9.3.5
  iPhone 5S 16GB/32GB/64GB: Ver.9.3.5
  iPhone 5C 16GB/32GB/64GB: Ver.9.3.5
  iPhone 5 16GB/32GB/64GB: Ver.9.3.5
  iPhone 4S 16GB/32GB/64GB: Ver.9.3.5

- For clarity in identifying your model of iPod, please see Apple's own document "Identifying iPod models" at http://support.apple.com/kb/HT1353.

Display example for iPod/iPhone main screen

① Song title/Episode title*
② Artist title/Podcast Title - Release Date*
③ Album title/Podcast title*
④ Total time
⑤ Elapsed time
⑥ Current song no./Total song no.
⑦ Progress bar
⑧ Artwork display
* *Podcast mode only*

Playback

1 **Press and hold 🚗 (CAR) button for at least 2 seconds to recall the Home screen.**

2 **Touch [iPod].**
The display shows the iPod mode screen.

3 Touch [◄◄] or [►►] or to select the desired track.

Returning to the beginning of the current (or previous) track:
Touch [◄◄].

Fast reverse the current track:
Touch and hold [◄◄].

Advancing to the beginning of the next track:
Touch [►►].

Fast forward the current track:
Touch and hold [►►].

4 To pause playback, touch [**❙❙**].

- *If a song is playing on the iPod/iPhone when it is connected to this unit, it will continue playing after the connection.*
- *An episode may have several chapters. The chapter can be changed by touching [◄◄] or [►►].*
- *If the artist, album or song name, created in iTunes, has too many characters, songs may not be played back when connected to this unit.*
- *Some characters may not be correctly displayed.*
- *You can also touch the progress bar to adjust the playback progress.*

Searching for a Music File

An iPod/iPhone can contain thousands of songs. For this reason, this unit can make various searches using the search function as shown below.
Using the Playlist/Artist/Album/Podcast/Audiobook/iTunes Radio/Genre/Composer/Song search mode's individual hierarchy, you can narrow down your search as shown in the table below.

<MUSIC Search Menu>

Hierarchy 1	Hierarchy 2	Hierarchy 3	Hierarchy 4
Playlists	Songs	—	—
Artists	Albums	Songs	—
Albums	Songs	—	—
Songs	—	—	—
Genres	Artists	Albums	Songs
Composers	Albums	Songs	—
Audiobooks	—	—	—
Podcasts	Episodes	—	—
iTunes Radio	—	—	—

For example: Searching by Artist name
The following example explains how an ARTISTS search is performed. Another search mode can be used for the same operation, although the hierarchy differs.

◼ **Searching by artist name**

1 Touch **[Search]** of Bottom banner during playback.
The search mode screen appears.

2 Touch **[Artists]**.
The Artists search screen is displayed.

3 Select the desired artist.

4 Touch the desired album's name.
All songs of the selected album are displayed.

5 Touch the desired song's name.
The selected song is played back.

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Direct Up/Down Function

If a song is selected via Playlist/Album/Audiobook search mode, you can switch the Playlist/Album/Audiobook directly by using this function.

Touch [≪] or [≫] to select the desired Playlist/Album/ Audiobook.

• *During Random playback, this operation is not possible.*

Repeat Play

Touch [↺] to repeatedly play back the currently track.
The files will be played repeatedly.
The Repeat mode switches every time [↺] is touched.

Repeat	→	Repeat	→	Repeat	→	Repeat
All		One		Off		All

• *Depending on the connected iPod/iPhone, the Repeat function may be various.*

Random Play (Shuffle)

Touch [✕] during playback.
The files will be played back in a random sequence.
The Random mode switches every time [✕] is touched.

Random	→	Random	→	Random	→	Random
Off		Album		Song		Off

Random Albums: The songs on each album are played back in proper order. Upon completing of all the songs on the album, the next album is selected randomly. This continues until all albums have been played.

Random Songs: Song shuffle randomly plays back songs within a selected category (playlist, album, etc.). The songs within the category are played just once until all songs have been played.

• *Depending on the connected iPod/iPhone, the Random function may be various.*

HDMI Device (Optional)

The device can connect with electronic device supporting HDMI output by HDMI interface and fulfill the play of audio and video with HD signal. But, the unit only displays the electronic device interface by mirror image, you cannot operate the electronic device by this unit.

• *The electronic device must possess HDMI output interface.*
• *Only purchase Alpine Special HDMI connection cable.*
• *If connecting an iPhone 6, etc., which with Lighting Connector you need to prepare the optional Digital AV Adapter.*
• *Hereby take the connection method of iPhone 6 for example.*
• *HDMI and AUX/DVD source can not be enjoyed in front and rear monitor at the same time. e.g. If the front source is HDMI, AUX or DVD is not available for rear source.*

iPhone 6

Lightning Digital AV Adapter (Type: A1438)

HDMI connector in this unit

Alpine special HDMI connection cable (sold separately)
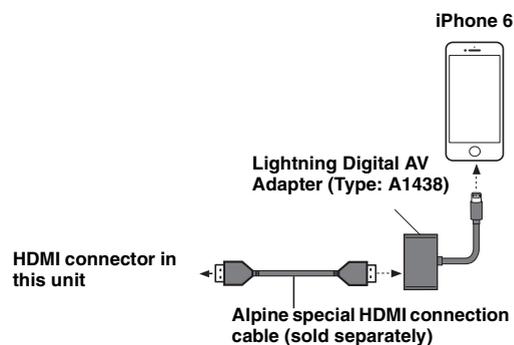
• *Not all devices with HDMI output interface can be recognised by this unit.*
• *Not all video with HD signal can be displayed by this unit.*

1 Press and hold 🚗 (CAR) button for at least 2 seconds to recall the Home screen.

2 Touch **[HDMI]**.

3 In HDMI player mode, the screen of the device displays the content of electronic equipment by mirror image.

List of Language Codes

(For details, see page 30.)

Abbreviation	Code	Language	Abbreviation	Code	Language	Abbreviation	Code	Language
AA	6565	Afar	IE	7369	Interlingue	RN	8278	Kirundi
AB	6566	Abkhazian	IK	7375	Inupiak	RO	8279	Romanian
AF	6570	Afrikaans	IN	7378	Indonesian	RU	8285	Russian
AM	6577	Amharic	IS	7383	Icelandic	RW	8287	Kinyarwanda
AR	6582	Arabic	IT	7384	Italian	SA	8365	Sanskrit
AS	6583	Assamese	IW	7387	Hebrew	SD	8368	Sindhi
AY	6589	Aymara	JP	7465	Japanese	SG	8371	Sangho
AZ	6590	Azerbaijani	JI	7473	Yiddish	SH	8372	Serbo-Croatian
BA	6665	Bashkir	JW	7487	Javanese	SI	8373	Singhalese
BE	6669	Byelorussian	KA	7565	Georgian	SK	8375	Slovak
BG	6671	Bulgarian	KK	7575	Kazakh	SL	8376	Slovenian
BH	6672	Bihari	KL	7576	Greenlandic	SM	8377	Samoan
BI	6673	Bislama	KM	7577	Cambodian	SN	8378	Shona
BN	6678	Bengali, Bangla	KN	7578	Kannada	SO	8379	Somali
BO	6679	Tibetan	KO	7579	Korean	SQ	8381	Albanian
BR	6682	Breton	KS	7583	Kashmiri	SR	8382	Serbian
CA	6765	Catalan	KU	7585	Kurdish	SS	8383	Siswati
CO	6779	Corsican	KY	7589	Kirghiz	ST	8384	Sesotho
CS	6783	Czech	LA	7665	Latin	SU	8385	Sundanese
CY	6789	Welsh	LN	7678	Lingala	SV	8386	Swedish
DA	6865	Danish	LO	7679	Laothian	SW	8387	Swahili
DE	6869	German	LT	7684	Lithuanian	TA	8465	Tamil
DZ	6890	Bhutani	LV	7686	Latvian, Lettish	TE	8469	Telugu
EL	6976	Greek	MG	7771	Malagasy	TG	8471	Tajik
EN	6978	English	MI	7773	Maori	TH	8472	Thai
EO	6979	Esperanto	MK	7775	Macedonian	TI	8473	Tigrinya
ES	6983	Spanish	ML	7776	Malayalam	TK	8475	Turkmen
ET	6984	Estonian	MN	7778	Mongolian	TL	8476	Tagalog
EU	6985	Basque	MO	7779	Moldavian	TN	8478	Setswana
FA	7065	Persian	MR	7782	Marathi	TO	8479	Tonga
FI	7073	Finnish	MS	7783	Malay	TR	8482	Turkish
FJ	7074	Fiji	MT	7784	Maltese	TS	8483	Tsonga
FO	7079	Faroese	MY	7789	Burmese	TT	8484	Tatar
FR	7082	French	NA	7865	Nauru	TW	8487	Twi
FY	7089	Frisian	NE	7869	Nepali	UK	8575	Ukrainian
GA	7165	Irish	NL	7876	Dutch	UR	8582	Urdu
GD	7168	Scots Gaelic	NO	7879	Norwegian	UZ	8590	Uzbek
GL	7176	Galician	OC	7967	Occitan	VI	8673	Vietnamese
GN	7178	Guarani	OM	7977	(Afan) Oromo	VO	8679	Volapuk
GU	7185	Gujarati	OR	7982	Oriya	WO	8779	Wolof
HA	7265	Hausa	PA	8065	Punjabi	XH	8872	Xhosa
HI	7273	Hindi	PL	8076	Polish	YO	8979	Yoruba
HR	7282	Croatian	PS	8083	Pashto, Pushto	ZH	9072	Chinese
HU	7285	Hungarian	PT	8084	Portuguese	ZU	9085	Zulu
HY	7289	Armenian	QU	8185	Quechua			
IA	7365	Interlingua	RM	8277	Rhaeto-Romance			

In Case of Difficulty

If you encounter a problem, please turn the power off, then on again. If the unit is still not functioning normally, please review the items in the following checklist. This guide will help you isolate the problem if the unit is at fault. Otherwise, make sure the rest of your system is properly connected, or then consult your authorized Alpine dealer.

Basic

No function or display.
• Vehicle's ignition is off.
  - If connected according to the instructions, the unit will not operate with the vehicle's ignition off.
• Improper power lead connections.
  - Check power lead connections.
• Blown fuse.
  - Check the fuse on the battery lead of the unit; replace with the proper value if necessary.

No sound or unnatural sound.
• Incorrect setting of volume/balance/fader controls.
  - Readjust the controls.
• Connections are not properly or securely made.
  - Check the connections and firmly connect.

Screen not displayed.
• Brightness/Contrast control is set at the minimum position.
  - Adjust the Brightness/Contrast control.
• Temperature in the vehicle is too low.
  - Increase the vehicle's interior temperature to operation temperature range.
• Connections to the DVD are not securely made.
  - Check the connections and firmly connect.
• The Parking Brake Lead is not connected.
• The Parking Brake is not engaged.
  - Connect the Parking Brake Lead, then engage the Parking Brake.

Movement of displayed picture is abnormal.
• Temperature in the vehicle is too high.
  - Allow the vehicle's interior temperature to cool.

The optional remote control is inoperative.
• The remote control sensor setting of "Remote Sensor Setting" (page 21) is not set to this unit ("Front").
  - Set for "Front".

Radio

Unable to receive stations.
• No antenna, or open connection in the antenna cable.
  - Make sure the antenna is properly connected; replace the antenna or cable if necessary.

Unable to tune stations in the seek mode.
• You are in a weak signal area.
  - Go to a strong signal area.
• If the area you are in is a primary signal area, the antenna may not be grounded and connected properly.
  - Check your antenna connections; make sure the antenna is properly grounded at its mounting location.
• The antenna may not be the proper length.
  - Make sure the antenna is fully extended; if broken, replace the antenna with a new one.

Broadcast is noisy.
• The antenna is not the proper length.
  - Extend the antenna fully; replace it if it is broken.
• The antenna is poorly grounded.
  - Make sure the antenna is grounded properly at its mounting location.
• The station signal is weak and noisy.
  - If above solution does not work, tune in another station.

Disc

Disc playback sound is wavering.
• Moisture condensation in the disc Module.
  - Allow enough time for the condensation to evaporate (about 1 hour).

Disc insertion not possible.
• A disc is already in this unit.
  - Eject the disc and remove it.
• The disc is being improperly inserted.
  - Insert the disc correctly. (See page 10)

Unable to fast forward or backward the disc.
• The disc has been damaged.
  - Eject the disc and discard it; using a damaged disc in your unit can cause damage to the mechanism.

Disc playback sound skips due to vibration.
• Improper mounting of the unit.
  - Securely re-mount the unit.
• Disc is very dirty.
  - Clean the disc.
• Disc has scratches.
  - Change the disc.
• The pick-up lens is dirty.
  - Do not use a commercially available lens cleaner disc. Consult your nearest Alpine dealer.

Disc playback sound skips without vibration.
• Dirty or scratched disc.
  - Clean the disc; a damaged disc should be replaced.

CD-R/CD-RW/DVD-R/DVD-RW/DVD+R/DVD+RW playback not possible.
• Close session (finalisation) has not been performed.
  - Perform finalisation and attempt playback again.

Error displays.
• Mechanical error.
  - Touch [⏏ Disc] on the Open/Tilt screen. After the error indication disappears, insert the disc again. If the above-mentioned solution does not solve the problem, consult your nearest Alpine dealer.

MP3/WMA/AAC/WAV is not played back.
• Writing error occurred. The CD format is not compatible.
  - Make sure the CD has been written in a supported format. Refer to "About MP3/WMA/AAC File of Disc" (page 16) and "About WAV File of Disc" (page 16), then rewrite in the format supported by this device.

Unit does not operate.
• Condensation.
  - Wait a while (about 1 hour) for the condensation to dry.

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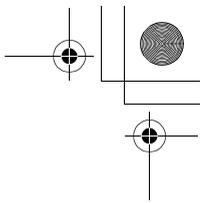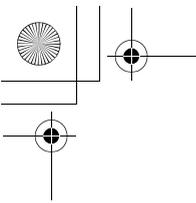
Playback does not start.
- Disc is loaded upside-down.
  - Check the disc and load it with the labelled side facing upward.
- Disc is dirty.
  - Clean the disc.
- A disc not able to play back with this unit is loaded.
  - Check if the disc is able to be played back.

Picture is unclear or noisy.
- Disc is being fast-forwarded or fast-reversed.
  - The picture may be slightly disturbed, but this is normal.
- Vehicle's battery power is weak.
  - Check the battery power and wiring.
    (The unit may malfunction if the battery power is under 11 volts with a load applied.)

Image stops sometimes.
- Disc is scratched.
  - Replaced with a non-scratched disc.

49-EN
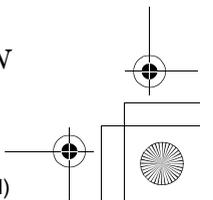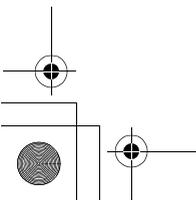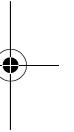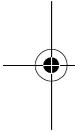
Specifications

MONITOR SECTION

Screen Size	9.0" (i109ED/i109AD)
	8.0" (i108ED/i108AD)
LCD Type	Transparent type TN LCD
Operation System	TFT active matrix
Number of Picture Elements	1,152,000 pcs. (800 × 480 × 3 (RGB))
Effective Number of Picture Elements	
	99% or more
Illumination System	LED

FM TUNER SECTION

Tuning Range	87.5 – 108.0 MHz
Mono Usable Sensitivity	9.3 dBf (0.8 μV/75 ohms)
Alternate Channel Selectivity	80 dB
Signal-to-Noise Ratio	65 dB
Stereo Separation	35 dB
Capture Ratio	2.0 dB

AW TUNER SECTION

Tuning Range	531 – 1,602 kHz
Sensitivity (IEC Standard)	22.5 μV/27.0 dBf

USB SECTION

USB requirements	USB 1.1/2.0
Max. Power Consumption	1,000 mA
USB Class	USB (Play From Device)/ USB (Mass Storage Class)
File System	FAT16/32
MP3 Decoding	MPEG-1/2 AUDIO Layer-3
WMA Decoding	Windows Media™ Audio
AAC Decoding	AAC-LC format ".m4a" file
Number of Channels	2-Channel (Stereo)
Frequency Response*	5 – 20,000 Hz (±1 dB)
Total Harmonic Distortion	0.008% (at 1 kHz)
Dynamic Range	95 dB
Signal-to-Noise Ratio	100 dB
Channel Separation	85 dB (at 1 kHz)

   * Frequency response may differ depending on the encoder software/bit rate.

CD/DVD SECTION

Frequency Response	5 – 20,000 Hz (±1 dB)
Wow & Flutter (% WRMS)	Below measurable limits
Total Harmonic Distortion	0.008% (at 1 kHz)
Dynamic Range	95 dB (at 1 kHz)
Channel Separation	85 dB (at 1 kHz)
Horizontal resolution	500 lines or greater
Video output level	1Vp-p (75 ohms)
Video S/N ratio	DVD: 60 dB
Audio S/N ratio	100 dB

PICKUP

Wave length	DVD: 666 nm
	CD: 785 nm
Laser power	CLASS II

BLUETOOTH SECTION

BLUETOOTH Specification	Bluetooth V2.1+EDR
Output Power	+4 dBm Max. (Power class 2)
Profile	HFP (Hands-Free Profile)
	OPP (Object Push Profile)
	PBAP (Phone Book Access Profile)
	A2DP (Advanced Audio Distribution Profile)
	AVRCP (Audio/Video Remote Control Profile)

GENERAL

Power Requirement	14.4 V DC
	(11–16 V allowable)
Operating temperature	-4°F to +140°F
	(-20°C to + 60°C)
Maximum Power Output	50 W × 4
Weight	2.83 kg (i109ED/i109AD)
	2.70 kg (i108ED/i108AD)
Audio output level	
Preout (Front, Rear):	2V/10k ohms (max.)
Preout (Subwoofer):	2V/10k ohms (max.)
AUX OUT:	1.2V/10k ohms (max.)

CHASSIS SIZE

Width	178 mm
Height	100 mm
Depth	153 mm (i109ED/i109AD)
	164 mm (i108ED/i108AD)

NOSE SIZE

Width	214 mm (i109ED/i109AD)
	190 mm (i108ED/i108AD)
Height	132 mm (i109ED/i109AD)
	121 mm (i108ED/i108AD)
Depth	23 mm (i109ED/i109AD)
	22 mm (i108ED/i108AD)

- *Due to continuous product improvement, specifications and design are subject to change without notice.*
- *The LCD panel is manufactured using an extremely high precision manufacturing technology. Its effective pixel ratio is over 99.99%. This means that there is a possibility that 0.01% of the pixels could be either always ON or OFF.*

CAUTION

CAUTION-Laser radiation when open, DO NOT STARE INTO BEAM

(Bottom side of player)

Installation and Connections

Before installing or connecting the unit, please read the following and page 6 of this manual thoroughly for proper use.

⚠ Warning

MAKE THE CORRECT CONNECTIONS.
Failure to make the proper connections may result in fire or product damage.

USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND.
(Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL.
Failure to do so may result in electric shock or injury due to electrical shorts.

DO NOT ALLOW CABLES TO BECOME ENTANGLED IN SURROUNDING OBJECTS.
Arrange wiring and cables in compliance with the manual to prevent obstructions when driving. Cables or wiring that obstruct or hang up on places such as the steering wheel, shift lever, brake pedals, etc. can be extremely hazardous.

DO NOT SPLICE INTO ELECTRICAL CABLES.
Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES.
When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

DO NOT USE BOLTS OR NUTS IN THE BRAKE OR STEERING SYSTEMS TO MAKE GROUND CONNECTIONS.
Bolts or nuts used for the brake or steering systems (or any other safety-related system), or tanks should NEVER be used for installations or ground connections. Using such parts could disable control of the vehicle and cause fire etc.

KEEP SMALL OBJECTS SUCH AS SCREWS OUT OF THE REACH OF CHILDREN.
Swallowing them may result in serious injury. If swallowed, consult a physician immediately.

DO NOT INSTALL IN LOCATIONS WHICH MIGHT HINDER VEHICLE OPERATION, SUCH AS THE STEERING WHEEL OR SHIFT LEVER.
Doing so may obstruct forward vision or hamper movement etc. and results in serious accident.

⚠ Caution

HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS.
The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the dealer where you purchased this product to have the work done.

USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY.
Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED BY A SHARP METAL EDGE.
Route the cables and wiring away from moving parts (like the seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wiring. If wiring passes through a hole in metal, use a rubber grommet to prevent the wire's insulation from being cut by the metal edge of the hole.

DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST.
Avoid installing the unit in locations with high incidence of moisture or dust. Moisture or dust that penetrates into this unit may result in product failure.

Precautions

- Be sure to disconnect the cable from the (–) battery post before installing this unit. This will reduce any chance of damage to the unit in case of a short-circuit.
- Be sure to connect the colour coded leads according to the diagram. Incorrect connections may cause the unit to malfunction or damage to the vehicle's electrical system.
- When making connections to the vehicle's electrical system, be aware of the factory installed components (e.g. on-board computer). Do not tap into these leads to provide power for this unit. When connecting this unit to the fuse box, make sure the fuse for the intended circuit of this unit has the appropriate amperage. Failure to do so may result in damage to the unit and/or the vehicle. When in doubt, consult your Alpine dealer.
- This unit uses female RCA-type jacks for connection to other units (e.g. amplifier) having RCA connectors. You may need an adaptor to connect other units. If so, please contact your authorized Alpine dealer for assistance.
- Be sure to connect the speaker (–) leads to the speaker (–) terminal. Never connect left and right channel speaker cables to each other or to the vehicle body.
- The Display must be completely retracted in the casing when installing. If it is not, problems may occur.
- When installing in automobiles, make sure the Display can open/close without coming in contact with the gear shift.

IMPORTANT	
Please record the serial number of your unit in the space provided on the right and keep it as a permanent record. The serial number plate is located on the bottom of the unit.	SERIAL NUMBER: _____ INSTALLATION DATE: _____ INSTALLATION TECHNICIAN: _____ PLACE OF PURCHASE: _____

Installation

To install this unit, refer to the manual in the separately purchased installation kit.

Caution

Do not block the unit's fan or heat sink, thus preventing air circulation. If blocked, heat will accumulate inside the unit and may cause a fire.

<example>　　　**Air ventilation hole**

Heat sink

Rear of the Unit
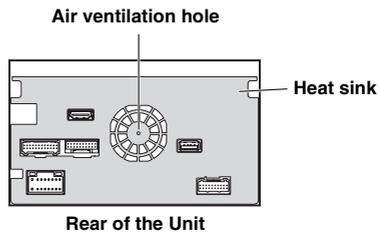
Caution concerning the installation location

1　**Before installing, make sure that the opening and closing of the display will not interfere with operation of the gear shift.**

Movable Display
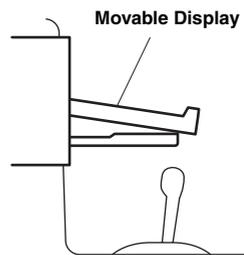
2　**Angle of installation**
Install at an angle between horizontal and 30°. Note that installing at an angle outside of this range will result in a loss of performance and possibly damage.

0 - 30°

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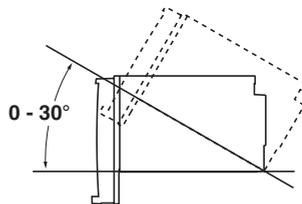
Connection Diagram of SPST Switch (sold separately)

(If the ACC power supply is not available)
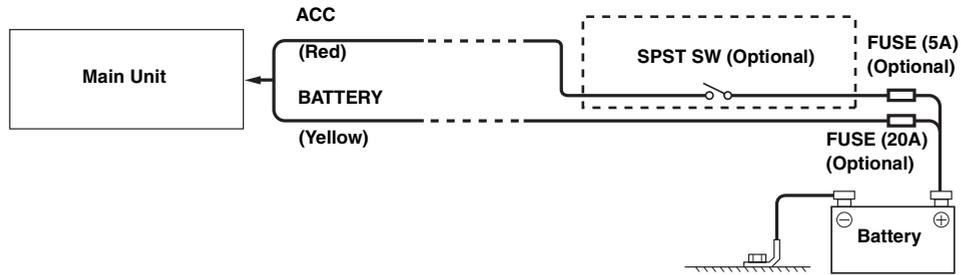
- *If your vehicle has no ACC power supply, add an SPST (Single-Pole, Single-Throw) switch (sold separately) and fuse (sold separately).*
- *The diagram and the fuse amperage shown above are in the case when this unit is used individually.*
- *If the switched power (ignition) lead of this unit is connected directly to the positive (+) post of the vehicle's battery, this unit draws some current (several hundred milliamperes) even when its switch is placed in the OFF position, and the battery may be discharged.*

To prevent external noise from entering the audio system.
- Locate the unit and route the leads at least 10 cm away from the car harness.
- Keep the battery power leads as far away from other leads as possible.
- Connect the ground lead securely to a bare metal spot (remove any paint, dirt or grease if necessary) of the car chassis.
- If you add an optional noise suppressor, connect it as far away from the unit as possible. Your Alpine dealer carries various noise suppressors, contact them for further information.
- Your Alpine dealer knows best about noise prevention measures so consult your dealer for further information.

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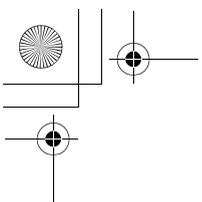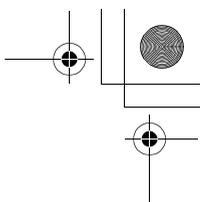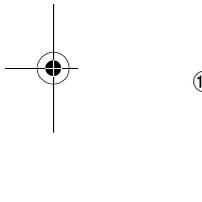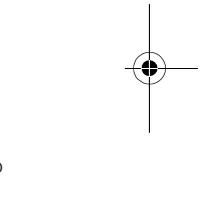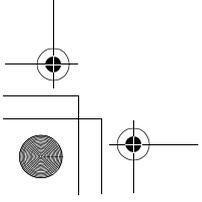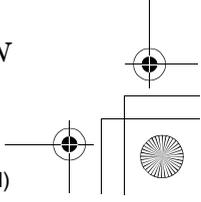
① **Radio Antenna Receptacle**

② **Remote Control Output Lead (Brown)**
Connect this lead to the remote control input lead. This lead outputs the controlling signals from the remote control.

③ **Remote Control Input Lead (Brown)**
Connect the external Alpine product to the remote control output lead.

④ **Video Input Connector (AUX INPUT) (Yellow)**
Input the video.

⑤ **Audio Input Connectors (AUX INPUT)**
RED is right and WHITE is left input the audio.

⑥ **Video Output Connector (AUX OUTPUT) (Yellow)**
Output the video.

⑦ **Audio Output Connectors (AUX OUTPUT)**
RED is right and WHITE is left output the audio.

⑧ **Direct CAMERA Input Connector**
Used when the optional direct camera is connected.

⑨ **CAMERA Input RCA Connector (Yellow)**
Used when connecting a camera with RCA Output Connector.

⑩ **Adaptive Steering Remote G.GND (i108ED/i108AD Only)**
To adaptive steering remote control interface box.
For details about connections, consult your nearest Alpine dealer.

⑪ **Adaptive Steering Remote Control In 1 Lead (Brown/Yellow) (i108ED/i108AD Only)**
To adaptive steering remote control interface box.
For details about connections, consult your nearest Alpine dealer.

⑫ **Adaptive Steering Remote Control In 2 Lead (Brown/Orange) (i108ED/i108AD Only)**
To adaptive steering remote control interface box.
For details about connections, consult your nearest Alpine dealer.

⑬ **Steering Remote Control Interface Connector (i109ED/i109AD Only)**
To steering remote control interface box.
For details about connections, consult your nearest Alpine dealer.

⑭ **AUDIO Input Connector**
Used when a portable music player,etc. is connected.
An optional adapter cable is required (standard RCA to 3.5mm mini-phono plug or 3.5mm to 3.5mm mini-phono plug).

⑮ **OBD2 GND Lead (Use for the future)**
Connect to the OBD2 GND Lead of your vehicle via a OBD2 connection cable.

⑯ **OBD2 TXD Lead (Use for the future)**
Connect to the OBD2 TXD Lead of your vehicle via a OBD2 connection cable.

⑰ **OBD2 RXD Lead (Use for the future)**
Connect to the OBD2 RXD Lead of your vehicle via a OBD2 connection cable.

⑱ **HDMI input Connector**
Input HDMI signal, you should prepare an optional Alpine special HDMI cable.

⑲ **EXT. KEY Connector (i109ED/i109AD only)**
To external Key Panel.

⑳ **REM/PRE OUT Connector**

㉑ **USB Connector**
To USB Memory or iPod/iPhone.

㉒ **AUX OUT/CAMERA Connector**

㉓ **Power Supply Connector**

㉔ **MIC Input Connector (i108ED/i108AD Only)**
To Microphone.

㉕ **Front Output RCA Connectors**
It can be used as Front Output RCA Connectors. RED is right and WHITE is left.

㉖ **Rear Output RCA Connectors**
It can be used as Rear Output RCA Connectors. RED is right and WHITE is left.

㉗ **Subwoofer RCA Connectors**
RED is right and WHITE is left.

㉘ **RCA Extension Cable (sold separately)**

㉙ **Remote Turn-On Lead (Blue/White)**
Connect this lead to the remote turn-on lead of your amplifier or signal processor.

㉚ **Reverse Lead (Orange/White)**
Connect to the plus side of the car's reverse lamp. This lamp illuminates when the transmission is shifted into reverse (R).
With this lead properly wired, the video picture automatically switches to the rear camera whenever the car is put into reverse (R).

㉛ **Power Antenna Lead (Blue)**
Connect this lead to the +B terminal of your power antenna, if applicable.

• *This lead should be used only for controlling the vehicle's power antenna. Do not use this lead to turn on an amplifier or a signal processor, etc.*

㉜ **Parking Brake Lead (Yellow/Blue)**
Connect this lead to the power supply side of the parking brake switch to transmit the parking brake status signals to this unit.

㉝ **Illumination Lead (Orange)**
This lead may be connected to the vehicle's instrument cluster illumination lead. This will allow the backlighting of this unit to dim whenever the vehicle's lights are turned on.

㉞ **Switched Power Lead (Ignition) (Red)**
Connect this lead to an open terminal on the vehicle's fuse box or another unused power source which provides (+) 12V only when the ignition is turned on or in the accessory position.

㉟ **Battery Lead (Yellow)**
Connect this lead to the positive (+) post of the vehicle's battery.

㊱ **Ground Lead (Black)**
Connect this lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened using the sheet metal screw provided.

㊲ **Fuse Holder (15A)**

㊳ **Left Rear (+) Speaker Output Lead (Green)**

㊴ **Left Rear (−) Speaker Output Lead (Green/Black)**

㊵ **Left Front (+) Speaker Output Lead (White)**

㊶ **Left Front (−) Speaker Output Lead (White/Black)**

㊷ **Right Front (−) Speaker Output Lead (Grey/Black)**

㊸ **Right Front (+) Speaker Output Lead (Grey)**

㊹ **Right Rear (−) Speaker Output Lead (Violet/Black)**

㊺ **Right Rear (+) Speaker Output Lead (Violet)**

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System Example

Connection of a USB Memory or an iPod/iPhone

USB connector

**iPod/iPhone
(sold separately)**

**Interface cable for iPod
(Included with iPod/iPhone)**

or

USB Memory (sold separately)

Connection of an External device

AUX OUT/CAMERA Connector

To Video Output terminal

① (Yellow)
(Red)
(White)
③

**Video signal output device or
Mobile Digital TV
Receiver (sold separately)**

To Audio Output terminal

To Video Input terminal

② (Yellow)
(Red)
(White)
③

Rear monitor (sold separately)

To Audio Input terminal

REMOTE IN
(Brown)
REMOTE OUT
(Brown)

④
⑤

REMOTE OUT
(White/Brown)
REMOTE IN
(White/Brown)

① **Video/Audio Input Connectors (AUX INPUT)**

② **Video/Audio Output Connectors (AUX OUTPUT)**
Used when connecting an optional monitor, etc.

③ **RCA Extension Cable (sold separately)**

④ **Remote Control Input Lead (Brown)**
Connect this lead to the remote control output lead. This
lead inputs the controlling signals from the remote control.

⑤ **Remote Control Output Lead (Brown)**
Connect this lead to the remote control input lead. This lead
outputs the controlling signals from the remote control.

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Connections

REMOTE OUT ②
(Brown)
REMOTE IN ③
(Brown)
(Yellow)
④ (Red)
⑤ (White)
(Yellow)
⑥ (Red)
⑦ (White)

Only fori108ED/i108AD
⑧ CAMERA1
⑨ CAMERA2

(Black) REMOTE G . GND ⑩
(Brown/Yellow) REMOTE CONTROL IN1 ⑪
Only for
i109ED/i109AD (Brown/Orange) REMOTE CONTROL IN2 ⑫
⑬

⑱ ㉑
AUDIO IN ⑭
OBD2 GND ⑮
OBD2 TXD ⑯
㉒ OBD2 RXD ⑰
⑲ ⑳ ㉔
㉓ FRONT OUT ㉕ ㉘
REAR OUT ㉖ ㉘
SUBW ㉗ ㉘

REMOTE TURN-ON ㉙
(Blue/White)
REVERSE ㉚
(Orange/White)
Supplied with i108ED/i108AD POWER ANT ㉛
(Blue)
PARKING BRAKE ㉜
(Yellow/Blue)
ILLUMINATION ㉝
(Orange)
IGNITION ㉞
(Red)
BATTERY ㉟
(Yellow)
㊲
GND ㊱
(Black) (Green) ㊳
(Green/Black) ㊴
(White) ㊵
(White/Black) ㊶
(Grey/Black) ㊷
(Grey) ㊸
(Violet/Black) ㊹
(Violet) ㊺

Antenna

— To remote input lead
— To remote output lead
— To Video Output terminal
— To Audio Output terminals
      (R, L)
— To Video Input terminal
— To Audio Input terminals
      (R, L)
— To Direct Rear/Top View camera
— To AUX Rear/Side camera

To adaptive steering remote
control interface box

— To steering remote control
interface box
— To audio output terminal

To vehicle OBD2 connector

To input terminal of amplifier
when adding an external amplifier

— To amplifier or equalizer
— To plus side of the back
lamp signal lead of the car
— To power antenna
— To the parking brake
signal lead
— To the instrument cluster
illumination lead

Ignition key

Battery
Rear Left
Front Left
Speakers
Front Right
Rear Right

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Connection of an External Amplifier

① **Front Output RCA Connectors**
RED is right and WHITE is left.

② **Rear Output RCA Connectors**
RED is right and WHITE is left.

③ **Subwoofer RCA Connector**

④ **RCA Extension Cable (sold separately)**

Connection of cameras (Direct camera and AUX camera)

CAMERA 1

Direct Rear/Top View camera (sold separately)

To Video Output terminal

CAMERA 2

Camera with RCA video output (sold separately)
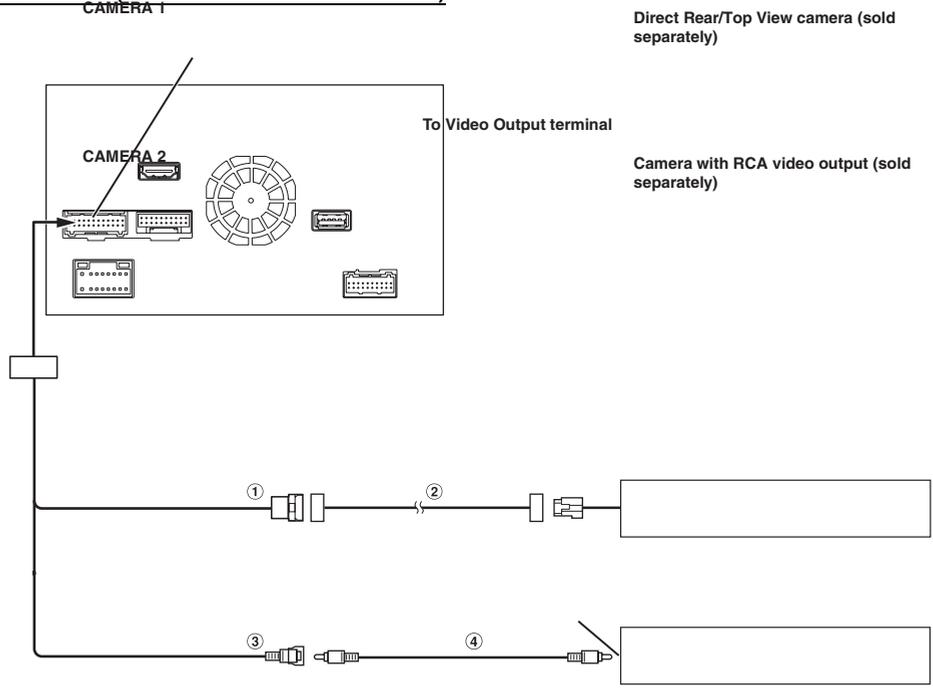
① **Direct CAMERA Input Connector**

② **Camera extension cable (Included with direct rearview camera)**

③ **CAMERA Input RCA Connector**

④ **RCA Extension Cable (sold separately)**

Thailand   This telecommunication equipment conforms to NTC technical requirement.

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