UTX-M08S
High Sound Quality Upgraded Audio Media Player

Product Manual

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Operating Instructions

Warning

⚠Warning

This symbol indicates important instructions. If ignored, it may result in severe personal injury or death.

Please do not use any function that may distract you during driving.
Any function that may influence your attention should be used only when the vehicle is stopped completely.
To use these functions, please first stop your vehicle in a safe area. Otherwise, it may result in an accident.

During driving, you must maintain the volume at a level such that the noise outside can still be heard.
It is very dangerous not to clearly hear an emergency vehicle alarm and road warning signal (such as railway crossing) due to excessively high volume, resulting in an accident. Moreover, a too high volume may damage your hearing.

Please do not disassemble or refit the device.
Otherwise, it may result in an accident, fire or electric shock.

Please only use the device on 12 V negative grounded vehicles.
(If you are not sure, please consult the agent for confirmation.) Otherwise, it may lead to an accident like a fire, etc.

Small items like batteries should be kept out of the reach of children.
If ingested, it may result in severe injury. Once ingested, please seek medical attention immediately.

For replacement of fuse, a new fuse with correct amperage must be used.
Otherwise, it may lead to fire or electric shock.

Please do not block the vent holes or panel radiator.
Otherwise, it may result in heat accumulation inside and may lead to a fire.

Please do not disassemble or refit the device.
Otherwise, it may result in an accident, fire or electric shock.

Please use this product on vehicles with a 12 V power supply.
Use of a different voltage may result in fire, electric shock, or other damages.

Please do not put your hand, finger, or a foreign body in the slot or gap.
Otherwise, it may result in personal injury or damaged product.

⚠Caution

The symbol indicates important notes. If ignored, it may result in personal injury or damaged equipment.

In case of problems, please stop using the device immediately.
Otherwise, it may result in personal injury or damaged product. Please return the product to the authorized Alpine dealer or nearby Alpine service center to repair.

⚠Precautions

Product cleaning
Please clean the product regularly with a soft dry cloth. For any dirt difficult to clean, only water can be used to soak the cloth. Any other solvents may lead to the dissolving of paints or plastic damage.

Temperature
Before starting the device, please ensure that the temperature inside the vehicle is between -10°C and +60°C.

Repair
In case of problems, please do not repair them by yourself. Please return the product to the Alpine dealer or nearby Alpine service center for repair.

Installation site
The device cannot be installed at the following locations:
• Under direct sunlight and near a hot source.
• With high humidity and near a water source.
• Dusty sites.
• Environments with violent vibration.

Protected USB connector
• The device provides three USB ports on the front and the rear and supports the connection and use of USB storage. When the front and rear ports are connected with rechargeable devices at the same time, the normal operation of this device cannot be guaranteed.
• Only USB storage can be connected to the USB ports of this device. Normal use of other USB products cannot be guaranteed when connected.
• If a USB connector is used, make sure you use the USB extension cable (accompanied by the product).
• Depending on the USB storage device connected, this device may be unable to operate or unable to execute some functions.
• This device supports FAT16/32, NTFS, and exFAT file systems.
• Please make sure that the number of connected songs in the USB storage is no more than 10,000 (maximum total number of playable songs in the front and rear USB storage). Otherwise, they cannot be played normally
• This device can play audio files in the format of MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD.
• It can display the performer's name/song title/song album etc. Some special characters may not be displayed correctly.

About the use of USB storage

⚠Caution

Under no circumstances shall Alpine be liable for any loss of data, even if those occur during the use of this product.
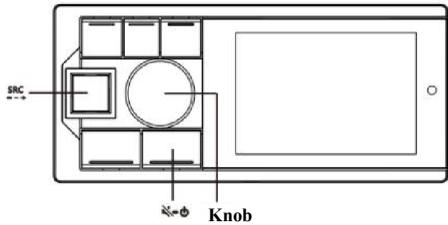• To prevent failure or damage, please pay attention to the points below.
   Please read through the user manual of the USB storage.
   Please don't touch the terminal with your hand or metal.
   Please prevent the USB storage from violent vibration.
   Please don't bend, drop, dismantle, or modify the device or immerse it in water.

- Avoid use or storage in the following places.
  In a vehicle under direct sunlight or exposed to the sun at high temperature.
  Places where high humidity or corrosive objects may be present.
- Install the USB storage in such a place that the operation by the driver would not be hindered.
- The USB storage may not operate correctly in places at excessively high or low temperatures.
- Only approved USB storage can be used. Please note that even an approved USB storage may be unable to operate correctly due to different types or states.
- Functions of the USB storage cannot be guaranteed. Please use the USB storage in accordance with the terms of the agreement.
- Depending on the type and state of the USB storage or settings of the encoding software, this device may not play or display normally.
- The device cannot play copy protected (copyright protected) files.
- It may take a while to start playing files in the USB storage. If there are special files other than audio files in the USB storage, it may take longer to play or search files.
- This device can play files with extensions of "mp3", "wma", "acc", "m4a", "wav", "flac", "ape", "dsd" ("dff" and "dsf").
- Please do not add the above extensions to non-audio data. Such non-audio data would be unrecognizable. Play of such non-audio data may damage the speaker or noise from the amplifier.
- It is recommended to back up important data on a PC.
- Never remove the USB device while it is playing. Switch the SOURCE to other options than USB before removing the USB device to prevent damage to the storage.

- *The text mark and logo of Bluetooth® are the registered trademarks held by Bluetooth SIG, Inc. Alpine Electronics has been authorized to use these text mark and logo. Other trademarks and names all belong to their holders.*
- *Products with a High-Resolution mark conform to the standards defined by the Acoustical Society of Japan. Alpine Electronics has been authorized by the Acoustical Society of Japan to use the High-Resolution mark.*

Preparation

List of accessories

Power on and off

Press any button on the host controller to turn on the device.
Press and hold ☂/-⏻ for at least 2 seconds to turn off the device.

Note:
- *When the device is powered on for the first time, the volume level is 12 at the start*

Set the sound mixing mode

This device is equipped with a high quality audio processor chip. You can choose ALPINE Direct mode to enjoy the high quality signal source of this device, or you may choose AUX Mix mode to enjoy the signal source of this device and listen to the sound of the original on-board device (such as the navigator) simultaneously.

Press SRC/✦ to switch the sound mixing mode. Take AUX Mix as an example below:

AUX Mixo ↔ ALPINE Direct

AUX Mix:
  While this device is playing music, the music or navigation prompt being played in the original on-board speaker is mixed together to play.

ALPINE Direct:
  Only enjoy the high quality music played by UTX-M08S.

Note:
- *When the same audio source is superposed, the auxiliary audio source is invalid. That is, when the current audio source is AUX, AUX Mix mode is invalid.*
- *Prior to using this function, the audio output of the original on-board speaker should be correctly connected to the AUX IN port of this device.*

Signal source selection

Press SRC/✦+ to change the signal source.
USB*[1] (default audio source) ↔ Bluetooth[*2]↔ High level ↔AUX
*1 When three USB storages are connected to this device, the audio files in them will be played in a consolidated USB audio source.
*2 Only display when connected with "Bluetooth", refer to "Bluetooth connection".

Initial system startup

RESET switch. Press and hold it for 3 seconds and the host machine will restart.
1 Power off the device.
2 Press RESET with a ballpoint or a similar pointed object.

RESET switch

Adjust the volume

Turn the knob until you get the desired volume.

The optional remote control may be used for the adjustment
Point the emitter of the remote control towards the remote control sensing window for control.
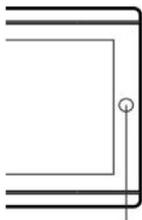
Remote control sensing window

It can be connected to the remote control interface box
Through the optional Alpine steering wheel remote control interface box, the steering wheel controller of the vehicle may be used to control this device. For details, please contact your Alpine dealer.

USB storage (optional)

Knob
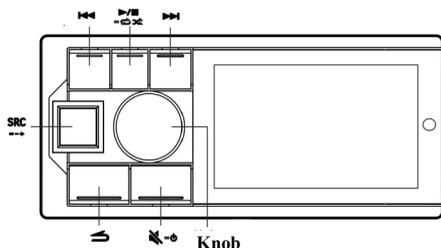
Note:
- *When three USB devices are connected to this device at the same time, the system will automatically consolidate the contents in the three USB devices as one USB audio source to play.*
- *Please do not connect two or more rechargeable devices to the USB ports of this device at the same time. Otherwise, normal operation cannot be guaranteed.*

Connect the USB storage (optional)

This device can play MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD files in the USB storage connected to it.

Play

1 Press **SRC/** to choose USB mode by default.
2 Press ⏮ or ⏭ to choose the desired tracks (files).

Press and hold ◄◄ or ►► to fast backward or fast forward.

3 Press ►/ΙΙ/- ⟲ ⤬ to switch between pause and play.

Press and hold ►/ΙΙ/- ⟲ ⤬ for a while to switch between the play modes cyclically.

(Blank) $\xrightarrow{*1}$ ⟲₁ $\xrightarrow{*2}$ ⟲◻ $\xrightarrow{*3}$ ⤬◻ $\xrightarrow{*4}$ ⤬ $\xrightarrow{*5}$ (Blank)
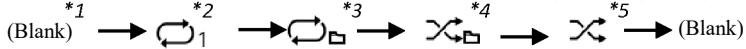
*1 Disable Loop Play and Shuffle Play.
*2 Repeat the current song only.
*3 Repeat the files in one folder only.
*4 Shuffle play for the folder.
*5 Shuffle play for all songs.

4 Turn the knob to adjust the volume. Turn it clockwise to increase the volume and turn it counter-clockwise to decrease the volume.

Press the knob to enter the track search interface and you can select USB1, USB2, and USB3 and select songs to play, or you can turn the knob to enter the search list and search for the songs you want to play.

5 Press ⏏ to go back to the previous level.

Note:
- *Depending on the files stored in the USB device, it may take some time to start playing.*
- *The format of the file being played will be displayed on the screen while playing.*
- *When playing a high resolution (Hi-Res) audio file, an icon of HR will be displayed on the screen.*
- *Any file with copy protection of DRM (digital rights management) cannot be played on this device.*
- *When playing a VBR (variable bit rate) encoded file, the play time may not be displayed correctly.*
- *If tag information is available, the song title/performer's name/album title will be displayed.*
- *Unsupported characters will be replaced with "◻".*

Search the songs you want to play

A USB storage can contain a large number of songs. You can find the songs you want to play quickly by search.

1 Press the knob to enter the song list interface and select "Search" to enable the search mode.

2 Turn the knob to select the category list by "Song", "Album", "File format", "Artist", "Date", or "File size".

   1.1 Select Song[*1], short press the knob to enter the song list.

   1.2 Select Album[*1], short press the knob to enter the album list. Turn the knob to select the desired album and short press the knob to enter the song list.

   1.3 Select File format[*1], short press the knob to enter the file format list. Turn the knob to select the desired file format and short press the knob to enter the song list.

   1.4 Select Artist[*1], short press the knob to enter the artist list. Turn the knob to select the desired artist and short press the knob to enter the song list.

   1.5 Select Date[*2], short press the knob to enter the song list.

   1.6 Select File size[*3], short press the knob to enter the song list.

   1 Rank in the order of 0→9 for numbers and A→Z for letters (rank by number first and letter later, not case-sensitive).

   2 Rank in the order of new→old for the actual modification date of the files, with no rules for the same date.

   3 Rank in the order of large→small for the storage space occupied by the files, with no rules for the same size.

3 Under the song list, turn the knob to select the songs you want to play and short press the knob to start playing the selected songs.

Note:
- *Press ⏏ to go back to the previous level.*
- *Empty files or invalid and unplayable files will not be displayed.*
- *When a huge number of songs are stored in the USB storage, searching may be slow.*

About MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD

⚠Caution

Except for personal use, it is strictly forbidden by copyright laws and international conventions to copy, distribute, or transmit any audio data (including MP3/WMA/AAC/M4A/ WAV/FLAC/APE/DSD data), whether for free or for a charge, without the consent of the copyright owner.

What is MP3?

MP3, with the formal name of "MPEG Audio Layer 3", is a compression standard defined by MPEG, a joint executing agency under ISO (International Organization for Standardization) and IEC. An MP3 file contains compressed audio data. MP3 encoding can compress audio data at an extremely high ratio, thus reducing the music file's size to one tenth of the original size. At the same time, the sound quality remains close to that of CD. MP3 achieves such a high compression rate by removing sounds that cannot be heard by humans or that are drowned by other sounds.

What is WMA?

WMA, or "Windows Media™ Audio", is compressed audio data. WMA is similar to MP3 audio data.

What is AAC?

AAC is the abbreviation of "Advanced Audio Coding", which is a basic audio compression format used for MPEG2 or MPEG4.

What is M4A?

M4A is the extension of standard MPEG-4 audio data. An M4A file contains compressed audio data.

What is WAV?

WAV is an audio file format developed by Microsoft. It conforms to the file specifications of RIFF(Resource Interchange File Format) and is used to save audio information and resources on the Windows platform. It is widely supported by the Windows platform and its applications. This format also supports several compression algorithms such as MSADPCM and CCITT A LAW, and supports multiple audio digital sampling frequencies and sound channels. A WAV file of standard format has the same 44.1kHz sampling frequency and 16 digitalizing bits as CD format, and thus have nearly the same sound quality as CD! It is the audio format that is the closest to lossless music, and therefore the file size is large.

What is FLAC?

FLAC can be explained as lossless audio compression and coding. FLAC is a well-known free audio compression and coding technology characterized by lossless compression.
Different from lossy compression and coding such as MP3 and AAC, it will not destroy any original audio information.

What is APE?

APE is one of the popular lossless compression formats for digital audio. Different from lossy compression formats such as MP3 that removes data (to which the human ear is not sensitive) irreversibly to reduce the size of the original file, lossless compression formats such as APE reduce the file size by a more refined recording method, so that the restored data is the same as the original file. The integrity of the file is ensured.

What is DSD?

DSD audio format is a lossless audio format. Due to its distinct encoding mode from common encoding modes, which is a digital encoding, it is a less popular but special audio format.

Method of creating MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD files

Use software with MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD coding and encoding for compression of audio data. For details about the creating of MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD files, please refer to the user manual of the software. The MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD files that can be played by this device have the following extensions.
MP3: "mp3"
WMA: "wma"
AAC: "m4a"

M4A: "m4a"
WAV: "wav"
FLAC: "flac"
APE: "ape"
DSD: "dsf" or "dff"

Files without extension cannot be played. The device does not support WMA Lossless, WMA Professional, protected files, or original AAC files (with the extension "aac").

There are many different versions of the AAC format. Make sure that the software used conforms to the above acceptable formats. Even if the file extension is valid, the format may be unplayable.

The device supports iTunes encoded AAC files. APE decoding only corresponds to APE v2 tag.

Supported play sampling frequency and bit rate

MP3

Sampling frequency:	48kHz、44.1kHz、32kHz、24kHz、22.05kHz、16kHz、12kHz、11.025kHz、8kHz
Bit rate:	8-320kbps

WMA

Sampling frequency:	48kHz、44.1kHz、32kHz、22.05kHz、16kHz、11.025kHz、8kHz
Bit rate:	12-192 kbps (stereo) 0-128 kbps (mono channel)

AAC

Sampling frequency:	48kHz、44.1kHz、32kHz、24kHz、22.05kHz、16kHz、12kHz、11.025kHz、8kHz
Bit rate:	8-320kbps

M4A

Sampling frequency:	48kHz、44.1kHz、32kHz、24kHz、22.05kHz、16kHz、12kHz、11.025kHz，8kHz
Bit rate:	8-500kbps

WAV

Sampling frequency:	192kHz、176.4kHz、96kHz、88.2kHz、48kHz、44.1kHz、32kHz、24kHz、22.05kHz、16kHz
Digitalizing bit:	8bit、16bit、24bit

FLAC

Sampling frequency:	192kHz、176.4kHz、96kHz、88.2kHz、48kHz、44.1kHz、32kHz、24kHz、22.05kHz、16kHz、12kHz、11.025kHz、8kHz
Digitalizing bit:	8bit、16bit、24bit

APE

Sampling frequency:	192kHz、176.4kHz、96kHz、88.2kHz、48kHz、44.1kHz、32kHz、24kHz、22.05kHz、16kHz、12kHz、11.025kHz、8kHz
Digitalizing bit:	16bit、24bit

DSD

Sampling rate:	DSD64 2.8224MHz、DSD128 5.6448MHz、DSD256 11.290MHz

Depending on the sampling frequency, this device may not play correctly.
When playing a VBR (variable bit rate) encoded file in the USB mode, the play time may not be displayed correctly.

Play MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD

Prepare the MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD files, and save them in the USB storage.
- Maximum number of playable files/folders
  USB storage: 10,000 files/700 folders (including root folder)
- The maximum depth of nested folders is 5 (including root folder).
If the USB storage exceeds the above limit, the device may be unable to play.
Please don't allow the total play time to exceed 1 hour.
RSA Data Security,Inc.MD5 Message-Digest Algorithm.

Supported media

This device can play files in USB storage

Corresponding file system

This device supports USB storage in FAT16/32, NTFS, or exFAT.

Order of files

The files are played in the order of the files/folders in the USB storage. Therefore, the order of play may be different from your expectation.
The play order of folders and files is shown below:

Root folder

Folder   MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD file
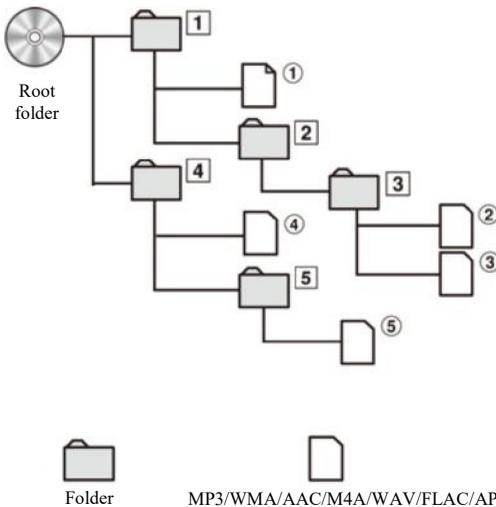
For folders with no valid and playable files or empty folders, the folder number/folder name will not be displayed.

Terms

Bit rate

It is the "sound" compression ratio defined for encoding. The higher the bit rate, the higher the sound quality but also, the larger the file.

Sampling frequency

This value indicates the number of times of data sampling (recording) per second. For example, a sampling frequency of 44.1 kHz is used for music CD; therefore, the sound is sampled (recorded) 44,100 times per second. The higher the sampling frequency, the higher the sound quality but also, the larger the data size.

Encoding

Converse music CD, WAVE (AIFF) files and other audio files into specified audio compression format.

Tagging

Write in the song information of the MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD file; for example, song title, album, file format, artist, data, and file size.

Root folder

The root folder (or root directory) can be found at the top of the file system. The root folder includes all folders and files.

Sound setting
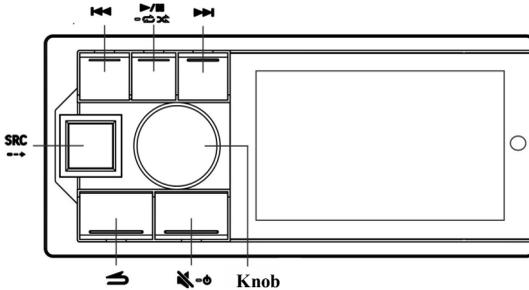
Audio setting

You can set this device flexibly based on your preference and purpose. You can change audio settings in the sound setting menu.

Use steps 1 to 5 to choose any setting mode to change the setting. For a detailed description of the selected setting items, please refer to the applicable sections below.

1 Press and hold the knob for at least 2 seconds to enter the settings interface.
2 Turn the knob to select "Sound Effect Setting" and then short press the knob.
   Preset Equalizer [*1]↔ Sound Effect Setting ↔ Sound Effect Clear Setting ↔ General ↔ Bluetooth
   *1 When "Sound Effect Clear Setting" is enabled, adjustments cannot be made.
3 Turn the knob to select the "Sound Effect Setting" menu and then short press the knob.
   Treble[*2]↔Bass[*2]↔Mega Bass↔Parametric Equalizer↔Channel Balance↔Fader[*3]↔Input Source
   Volume↔Time Correction↔Divider Settings[*4]↔Sound Setting Storage
   *2 Any change made to the "Preset Equalizer" or "Parametric Equalizer" will be reflected in the settings of the other.
   *3 When the "Divider Settings" is set to "Active Divide by 3", adjustment cannot be made. Please refer to "About the divider" for more information.
   *4 Depending on the "Divider Settings", the setting items may be different. Please refer to "About the divider" for more information.
4 Turn the knob to change the setting or enter the next level, and then short press the knob.
5 Press SRC/⏻ to deactivate setting mode.

Note:
   • *Press ⏎ to return to the previous sound menu mode.*

Preset equalizer

A total of 10 typical equalizer settings will be preset in the factory for a variety of audio source materials.
Standard (initial setting) ↔ Popular ↔ Rock ↔ News ↔ Jazz ↔ Electronic ↔ Hip-hop ↔ Light music ↔ Country ↔ Classic ↔ Custom

Note:
   • *The "Custom" item will be displayed when adjustment is made to the Bass/Treble or Parametric Equalizer settings, and the "Custom" item will be displayed.*

Adjust Treble/Bass level

You can select Treble or Bass and adjust the level based on your own preference.
Setting item: Treble/Bass
Setting content: -7~+7 (initial value: 0)

Set Bass

Turn on/off the subwoofer

When the subwoofer is turned on, you can adjust the phase output level of the subwoofer.
Setting item: Bass
Setting content: Off/On (initial setting)

Set the phase of the subwoofer

Set the phase of the subwoofer to 0° (normal phase) or 180° (reversed phase). To adjust the phase, turn the knob.
Setting item: Bass phase
Setting content: 0° (initial setting)/180°

Set the level of the subwoofer

When the subwoofer is turned on, you can adjust the output level of the subwoofer.
Setting item: Bass level
Setting content: 0~+15 (initial value: 9)

Adjust the Parametric Equalizer curve

You can modify the equalizer settings to better fit the response curve to your preference.
1 After selecting Parametric Equalizer in the Sound Effect Settings, turn the knob to select the desired waveband, and then short press the knob.
2 After selecting the frequency, short press the knob and turn the knob to select the frequency value.
Press ⏎ to exit frequency settings.
3 Repeat step 2 and adjust the Q value and gain in the selected waveband.

Adjust the waveband

Setting content: waveband 1/waveband 2/waveband 3/waveband 4/waveband 5/waveband 6/waveband 7/waveband 8/waveband 9/waveband 10

Adjust the frequency

Adjustable frequency band:20H~20kHz
Band 1:20Hz~63Hz(31Hz)
Band 2:31Hz~125Hz(63Hz)
Band 3:63Hz~315Hz(125Hz)
Band 4:125Hz~500Hz(250Hz)
Band 5:250Hz~1kHz(500Hz)
Band 6:500Hz~2kHz(1kHz)
Band 7:1kHz~4kHz(2kHz)
Band 8:2kHz~7.2kHz(4kHz)
Band 9:5.8kHz~12kHz(8kHz)
Band 10:9kHz~20kHz(16kHz)

Adjust the Q value

Adjustable Q value range: 0.404~28.85 (initial setting: 3.056)

Adjust the gain

Adjustable gain range: -12dB~+12dB (initial setting: 0)

Adjust the channel balance of the speaker output

Setting item: channel balance
Setting content: L15~0~R15 (initial value: 0)

Adjust the fader of the speaker output

Setting item: fader
Setting content: F15~0~R15 (initial value: 0)

Adjust input source volume

1 Select input source volume adjustment in the sound effect setting mode, and then short press the knob.
2 Turn the knob to select USB audio source, and then short press the knob to confirm.
3 Turn the knob to adjust the volume in the setting range of -60dB~0dB (initial value: 0dB), and press the exit button to select the source.
4 Repeat step 2 and step 3 to adjust the Bluetooth, high level, and AUX volume.

Note:
- *For audio sources, the options available are USB ↔ Bluetooth ↔ High level ↔ AUX*

Adjust time correction

Before performing the following steps, refer to "About time correction".
1 Select "Adjust time correction" in the sound effect setting mode, turn the knob to select the speaker or time correction unit for adjustment, and then short press the knob.
Left front speaker (F-L)↔Right front speaker (F-R)↔Left rear speaker (R-L)↔Right rear speaker (R-R)↔Left subwoofer*(SW-L)↔Right subwoofer*(SW-R)
* When the mega bass mode is turned off, adjustments cannot be made.
2 Turn the knob to adjust the distance or time correction unit of the speaker selected, and then short press the knob.
Milliseconds: 0.000ms~10.000ms (0.01ms/level)
Centimeters: 0~346cm (0.3cm/level)
Inches: 0~136inch (0.1inch/level)
By setting these values, the speaker's sound can reach the listener's location at the same time as the sounds of other speakers.

Note:
- *The sum of adjustable distances of all speakers shall be less than 510 centimeters/201 inches/15 milliseconds.*
- *Options of time correction unit: ms (millisecond)/cm (centimeter)/inch*

Adjust divider settings

Before performing the following steps, refer to "About the divider".
1 After selecting divider settings in the sound effect setting mode, turn the knob to select the desired sound channel, and then short press the knob.
Active division by 2
Front speaker ↔ Rear speaker ↔ Subwoofer*

Active division by 3
Bass ↔ Alto low-pass ↔ Alto high-pass ↔ Treble
When the mega bass mode is turned off, adjustments cannot be made.
2 Turn the knob to select the desired setting item and then short press the knob.

Select cut-off frequency

Active division by 2
Setting contents:
Frequency: 20/25/32/40/50/63/80 (initial setting)/100/125/160/200(Hz)

Active division by 3
Setting contents:
Bass speaker/Alto low-pass speaker*:
20/25/32/40/50/63/80/100/125/160/200/250/315/400/500 (initial setting)/630/800(Hz)
Alto high-pass speaker:
20/25/32/40/50/63/80/100/125/160/200/250/315/400/500/630/800/1k/
1.2k/1.6k/2k/2.5k/3.2k/4k/5k (initial setting)/6.3k/8k/10k/12.5k/16k/20k(Hz)
Treble speaker:
1k/1.2k/1.6k/2k/2.5k/3.2k/4k/5k(initial setting)/6.3k/8k/10k/12.5k/16k/20k(Hz)
The set value of cut-off frequency for the alto and bass speakers should not be higher than that for alto and treble speakers.

Adjust the slope

Setting contents: 6/12 (initial setting)/18/24/30/36/42/48(dB/Oct.) or off

Sound effect clear setting

When this setting is enabled, the settings on sound effects such as preset equalizer will become invalid. Disable this setting and the previous sound effect settings will be restored.
Setting item: sound effect clear setting
Setting content: Off (initial setting)/On

Save and recall sound setting parameters

Save sound setting parameters

After purchasing and installing this product at a specified Alpine authorized dealer, professional technicians will tune and save the sound setting parameters to "Dealer Settings".
In addition to "Dealer Settings", if you have your own setting preference, you may set sound parameters including preset equalizer, bass, treble, and divider settings, then select "Custom Settings", and press and hold the knob for more than 2 seconds to save the tuned sound settings to "Custom Settings".

Recall the saved sound setting parameters

After selecting "Dealer Setting" or "Custom Settings", short press the knob to recall the tuned sound setting parameters.
Note:
- *Even when this device is reset or disconnected from the battery, the saved contents will not be deleted.*
- *Dealer Setting: for optional recall only, it can only be saved after calling the electrical test mode with the composite buttons.*
- *Custom Settings: can be used for recall, saving, and modification.*

About time correction

The distance between the listener and the speakers in the vehicle can vary greatly due to the complicated speaker placement. This variation of distance between the listener and the speakers may result in the variation in acoustic image and frequency. This is due to the delay of sound arriving at the left ear and the right ear.

In order to solve the problem, this device can delay the audio signals transmitted to the speakers nearest the listener. Thus it appears that the distance to these speakers is extended. It can equalize the distances between the listener and the left and right speakers so as to obtain the best effect. Each speaker will be adjusted with a level difference of 3.4 cm.

Examples of listener location is as follows:

Example 1: Left front seat

Adjust the time correction level of the front left speaker to a large value and that of the right rear speaker to 0 or a small value.
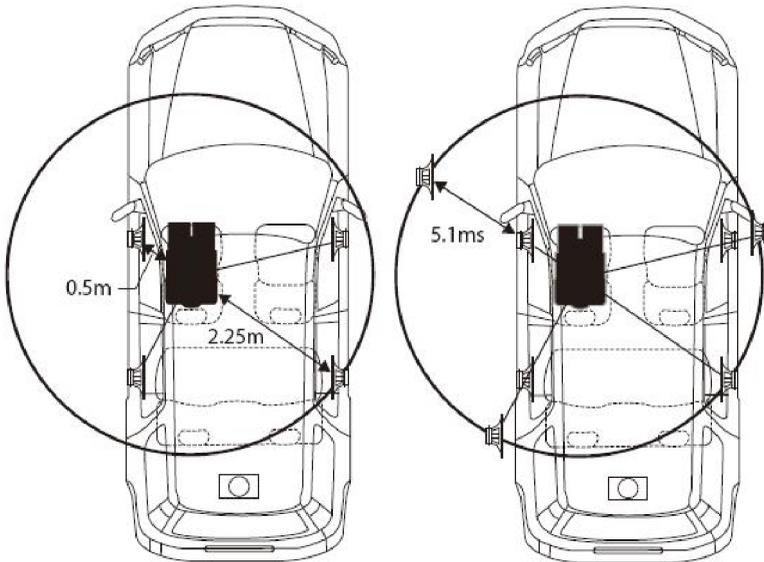
The distances between the listener location and the speakers are different, and therefore the sound is not balanced.

The distance difference between the left front speaker and the right rear speaker is 1.75 m (68-7/8").

Here we will calculate the time correction value of the left front speaker in the figure above.

> Conditions:
> The farthest speaker - listener location:2.25m(88-9/16")
> Left front speaker - listener location: 0.5m(19-11/16")
> Calculation: L=2.25m - 0.5m=1.75m(68-7/8")
> Time correction=1.75÷343*×1000=5.1(ms)
> *Sound speed: When 20°C, 343m/s (765mph)

In other words, when the time correction value of the left front speaker is set to 5.1 ms, its distance from the listener appears to be the same as the distance between the listener and the farthest speaker. Time correction can eliminate the time difference of sound reaching the listener's location.

The time of the left front speaker is corrected for 5.1 ms, so that sounds from it reach the listener location at the same time as sounds from other speakers.

Example 2: all seats

Adjust the time correction levels of all speakers to nearly the same.
1 Seat at the listener location (driver seat etc.) and measure the distance between the head and each speaker (meters).
2 Calculate the difference of distance correction value between the farthest speaker and other speakers.
   L=(distance from the farthest speakers)–(distance from other speaker)
   These values are the time correction values of different speakers. By setting these values, each speaker's sound can reach the listener's location simultaneously with the sounds of other speakers.

List of time correction values

Delay number	Time difference (ms)	Distance (cm)	Distance (inch)	Delay number	Time difference (ms)	Distance (cm)	Distance (inch)
0	0.00	0.00	0.00	32	0.32	11.07	4.32
1	0.01	0.34	0.10	33	0.33	11.41	4.45
2	0.02	0.69	0.24	34	0.34	11.76	4.59
3	0.03	1.03	0.37	32	0.32	11.07	4.32
4	0.04	1.38	0.51	33	0.33	11.41	4.45
5	0.05	1.72	0.64	34	0.34	11.76	4.59
6	0.06	2.07	0.78	35	0.35	12.10	4.72
7	0.07	2.42	0.92	36	0.36	12.45	4.86
8	0.08	2.76	1.05	37	0.37	12.80	5.00
9	0.09	3.11	1.19	38	0.38	13.14	5.13
10	0.10	3.45	1.32	39	0.39	13.49	5.27
11	0.11	3.80	1.46	40	0.40	13.83	5.40
12	0.12	4.15	1.60	41	0.41	14.18	5.54
13	0.13	4.49	1.73	42	0.42	14.53	5.68
14	0.14	4.84	1.87	43	0.43	14.87	5.81
15	0.15	5.18	2.00	44	0.44	15.22	5.95
16	0.16	5.53	2.14	45	0.45	15.56	6.08
17	0.17	5.88	2.28	46	0.46	15.91	6.22
18	0.18	6.22	2.41	47	0.47	16.26	6.36
19	0.19	6.57	2.55	48	0.48	16.60	6.49
20	0.20	6.91	2.68	49	0.49	16.95	6.63
21	0.21	7.26	2.82	50	0.50	17.29	6.76
22	0.22	7.61	2.96	51	0.51	17.64	6.90
23	0.23	7.95	3.09	52	0.52	17.99	7.04
24	0.24	8.30	3.23	53	0.53	18.33	7.17
25	0.25	8.64	3.36	54	0.54	18.68	7.31
26	0.26	8.99	3.50	55	0.55	19.02	7.44
27	0.27	9.34	3.64	56	0.56	19.37	7.58
28	0.28	9.68	3.77	57	0.57	19.72	7.72
29	0.29	10.03	3.91	58	0.58	20.06	7.85
30	0.30	10.37	4.04	59	0.59	20.41	7.99
31	0.31	10.72	4.18	60	0.60	20.75	8.12

61	0.61	21.10	8.26	106	1.06	36.67	14.38
62	0.62	21.45	8.40	107	1.07	37.02	14.52
63	0.63	21.79	8.53	108	1.08	37.36	14.65
64	0.64	22.14	8.67	109	1.09	37.71	14.79
65	0.65	22.48	8.80	110	1.10	38.05	14.92
66	0.66	22.83	8.94	111	1.11	38.40	15.06
67	0.67	23.18	9.08	112	1.12	38.75	15.20
68	0.68	23.52	9.21	113	1.13	39.09	15.33
69	0.69	23.87	9.35	114	1.14	39.44	15.47
70	0.70	24.21	9.48	115	1.15	39.78	15.60
71	0.71	24.56	9.62	116	1.16	40.13	15.74
72	0.72	24.91	9.76	117	1.17	40.48	15.88
73	0.73	25.25	9.89	118	1.18	40.82	16.01
74	0.74	25.60	10.03	119	1.19	41.17	16.15
75	0.75	25.94	10.16	120	1.20	41.51	16.28
76	0.76	26.29	10.30	121	1.21	41.86	16.42
77	0.77	26.64	10.44	122	1.22	42.21	16.56
78	0.78	26.98	10.57	123	1.23	42.55	16.69
79	0.79	27.33	10.71	124	1.24	42.90	16.83
80	0.80	27.67	10.84	125	1.25	43.24	16.96
81	0.81	28.02	10.98	126	1.26	43.59	17.10
82	0.82	28.37	11.12	127	1.27	43.94	17.24
83	0.83	28.71	11.25	128	1.28	44.28	17.37
84	0.84	29.06	11.39	129	1.29	44.63	17.51
85	0.85	29.40	11.52	130	1.30	44.97	17.64
86	0.86	29.75	11.66	131	1.31	45.32	17.78
87	0.87	30.10	11.80	132	1.32	45.67	17.92
88	0.88	30.44	11.93	133	1.33	46.01	18.05
89	0.89	30.79	12.07	134	1.34	46.36	18.19
90	0.90	31.13	12.20	135	1.35	46.70	18.32
91	0.91	31.48	12.34	136	1.36	47.05	18.46
92	0.92	31.83	12.48	137	1.37	47.40	18.60
93	0.93	32.17	12.61	138	1.38	47.74	18.73
94	0.94	32.52	12.75	139	1.39	48.09	18.87
95	0.95	32.86	12.88	140	1.40	48.43	19.00
96	0.96	33.21	13.02	141	1.41	48.78	19.14
97	0.97	33.56	13.16	142	1.42	49.13	19.28
98	0.98	33.90	13.29	143	1.43	49.47	19.41
99	0.99	34.25	13.43	144	1.44	49.82	19.55
100	1.00	34.59	13.56	145	1.45	50.16	19.68
101	1.01	34.94	13.70	146	1.46	50.51	19.82
102	1.02	35.29	13.84	147	1.47	50.86	19.96
103	1.03	35.63	13.97	148	1.48	51.20	20.09
104	1.04	35.98	14.11	149	1.49	51.55	20.23
105	1.05	36.32	14.24	150	1.50	51.89	20.36

151	1.51	52.24	20.50	196	1.99	68.85	27.03
152	1.52	52.59	20.64	197	2.00	69.19	27.16
153	1.53	52.93	20.77	198	2.01	69.54	27.30
154	1.54	53.28	20.91	199	2.02	69.89	27.44
155	1.55	53.62	21.04	200	2.03	70.23	27.57
156	1.56	53.97	21.18	201	2.04	70.58	27.71
157	1.57	54.32	21.32	202	2.05	70.92	27.84
158	1.58	54.66	21.45	203	2.06	71.27	27.98
159	1.59	55.01	21.59	204	2.07	71.62	28.12
160	1.60	55.35	21.72	205	2.08	71.96	28.25
161	1.61	55.70	21.86	206	2.09	72.31	28.39
162	1.62	56.05	22.00	207	2.10	72.65	28.52
163	1.63	56.39	22.13	208	2.11	73.00	28.66
164	1.64	56.74	22.27	209	2.12	73.35	28.80
165	1.65	57.08	22.40	210	2.13	73.69	28.93
166	1.66	57.43	22.54	211	2.14	74.04	29.07
167	1.67	57.78	22.68	212	2.15	74.38	29.20
168	1.68	58.12	22.81	213	2.16	74.73	29.34
169	1.69	58.47	22.95	214	2.17	75.08	29.48
170	1.73	59.85	23.49	215	2.18	75.42	29.61
171	1.74	60.20	23.63	216	2.19	75.77	29.75
172	1.75	60.54	23.76	217	2.20	76.11	29.88
173	1.76	60.89	23.90	218	2.21	76.46	30.02
174	1.77	61.24	24.04	219	2.22	76.81	30.16
175	1.78	61.58	24.17	220	2.23	77.15	30.29
176	1.79	61.93	24.31	221	2.24	77.50	30.43
177	1.80	62.27	24.44	222	2.25	77.84	30.56
178	1.81	62.62	24.58	223	2.26	78.19	30.70
179	1.82	62.97	24.72	224	2.27	78.54	30.84
180	1.83	63.31	24.85	225	2.28	78.88	30.97
181	1.84	63.66	24.99	226	2.29	79.23	31.11
182	1.85	64.00	25.12	227	2.30	79.57	31.24
183	1.86	64.35	25.26	228	2.31	79.92	31.38
184	1.87	64.70	25.40	229	2.32	80.27	31.52
185	1.88	65.04	25.53	230	2.33	80.61	31.65
186	1.89	65.39	25.67	231	2.34	80.96	31.79
187	1.90	65.73	25.80	232	2.35	81.30	31.92
188	1.91	66.08	25.94	233	2.36	81.65	32.06
189	1.92	66.43	26.08	226	2.29	79.23	31.11
190	1.93	66.77	26.21	227	2.30	79.57	31.24
191	1.94	67.12	26.35	228	2.31	79.92	31.38
192	1.95	67.46	26.48	229	2.32	80.27	31.52
193	1.96	67.81	26.62	230	2.33	80.61	31.65
194	1.97	68.16	26.76	231	2.34	80.96	31.79
195	1.98	68.50	26.89	232	2.35	81.30	31.92

233	2.36	81.65	32.06	278	2.81	97.22	2.81
234	2.37	82.00	32.20	279	2.82	97.57	2.82
235	2.38	82.34	32.33	280	2.83	97.91	2.83
236	2.39	82.69	32.47	281	2.84	98.26	2.84
237	2.40	83.03	32.60	282	2.85	98.60	2.85
238	2.41	83.38	32.74	283	2.86	98.95	2.86
239	2.42	83.73	32.88	284	2.87	99.30	39.00
240	2.43	84.07	33.01	285	2.88	99.64	39.13
241	2.44	84.42	33.15	286	2.89	99.99	39.27
242	2.45	84.76	33.28	287	2.90	100.33	39.40
243	2.46	85.11	33.42	288	2.91	100.68	39.54
244	2.47	85.46	33.56	289	2.92	101.03	39.68
245	2.48	85.80	33.69	290	2.93	101.37	39.81
246	2.49	86.15	33.83	291	2.94	101.72	39.95
247	2.50	86.49	33.96	292	2.95	102.06	40.08
248	2.51	86.84	34.10	293	2.96	102.41	40.22
249	2.52	87.19	34.24	294	2.97	102.76	40.36
250	2.53	87.53	34.37	295	2.98	103.10	40.49
251	2.54	87.88	34.51	296	2.99	103.45	40.63
252	2.55	88.22	34.64	297	3.00	103.79	40.76
253	2.56	88.57	34.78	298	3.01	104.14	40.90
254	2.57	88.92	2.57	299	3.02	104.49	41.04
255	2.58	89.26	2.58	300	3.03	104.83	41.17
256	2.59	89.61	2.59	301	3.04	105.18	41.31
257	2.60	89.95	2.60	302	3.05	105.52	41.44
258	2.61	90.30	2.61	303	3.06	105.87	41.58
259	2.62	90.65	2.62	304	3.07	106.22	41.72
260	2.63	90.99	2.63	305	3.08	106.56	41.85
261	2.64	91.34	2.64	307	3.10	107.25	42.12
262	2.65	91.68	2.65	308	3.11	107.60	42.26
263	2.66	92.03	2.66	309	3.12	107.95	42.40
264	2.67	92.38	2.67	310	3.13	108.29	42.53
265	2.68	92.72	2.68	311	3.14	108.64	42.67
266	2.69	93.07	2.69	312	3.15	108.98	42.80
267	2.70	93.41	2.70	313	3.16	109.33	42.94
268	2.71	93.76	2.71	314	3.17	109.68	43.08
269	2.72	94.11	2.72	315	3.18	110.02	43.21
270	2.73	94.45	2.73	316	3.19	110.37	43.35
271	2.74	94.80	2.74	317	3.20	110.71	43.48
272	2.75	95.14	2.75	318	3.21	111.06	43.62
273	2.76	95.49	2.76	319	3.22	111.41	43.76
274	2.77	95.84	2.77	320	3.23	111.75	43.89
275	2.78	96.18	2.78	321	3.24	112.10	44.03
276	2.79	96.53	2.79	322	3.25	112.44	44.16
277	2.80	96.87	2.80	323	3.26	112.79	44.30

324	3.27	113.14	44.44	369	3.72	128.71	50.56
325	3.28	113.48	44.57	370	3.73	129.05	50.69
326	3.29	113.83	44.71	371	3.74	129.40	50.83
327	3.30	114.17	44.84	372	3.75	129.74	50.96
328	3.31	114.52	44.98	373	3.76	130.09	51.10
329	3.32	114.87	45.12	374	3.77	130.44	51.24
330	3.33	115.21	45.25	375	3.78	130.78	51.37
331	3.34	115.56	45.39	376	3.79	131.13	51.51
332	3.35	115.90	45.52	377	3.80	131.47	51.64
333	3.36	116.25	45.66	378	3.81	131.82	51.78
334	3.37	116.60	45.80	379	3.82	132.17	51.92
335	3.38	116.94	45.93	380	3.83	132.51	52.05
336	3.39	117.29	46.07	381	3.84	132.86	52.19
337	3.40	117.63	46.20	382	3.85	133.20	52.32
338	3.41	117.98	46.34	383	3.86	133.55	52.46
339	3.42	118.33	46.48	384	3.87	133.90	52.60
340	3.43	118.67	46.61	385	3.88	134.24	52.73
341	3.44	119.02	46.75	386	3.89	134.59	52.87
342	3.45	119.36	46.88	387	3.90	134.93	53.00
343	3.46	119.71	47.02	388	3.91	135.28	53.14
344	3.47	120.06	47.16	389	3.92	135.63	53.28
345	3.48	120.40	47.29	390	3.93	135.97	53.41
346	3.49	120.75	47.43	391	3.94	136.32	53.55
347	3.50	121.09	47.56	392	3.95	136.66	53.68
348	3.51	121.44	47.70	393	3.96	137.01	53.82
349	3.52	121.79	47.84	394	3.97	137.36	53.96
350	3.53	122.13	47.97	395	3.98	137.70	54.09
351	3.54	122.48	48.11	396	3.99	138.05	54.23
352	3.55	122.82	48.24	397	4.00	138.39	54.36
353	3.56	123.17	48.38	398	4.01	138.74	54.50
354	3.57	123.52	48.52	399	4.02	139.09	54.64
355	3.58	123.86	48.65	400	4.03	139.43	54.77
356	3.59	124.21	48.79	401	4.04	139.78	54.91
357	3.60	124.55	48.92	402	4.05	140.12	55.04
358	3.61	124.90	49.06	403	4.06	140.47	55.18
359	3.62	125.25	3.62	404	4.07	140.82	55.32
360	3.63	125.59	3.63	405	4.08	141.16	55.45
361	3.64	125.94	3.64	406	4.09	141.51	55.59
362	3.65	126.28	49.60	407	4.10	141.85	55.72
363	3.66	126.63	49.74	408	4.11	142.20	55.86
364	3.67	126.98	49.88	409	4.12	142.55	56.00
365	3.68	127.32	50.01	410	4.13	142.89	56.13
366	3.69	127.67	50.15	411	4.14	143.24	56.27
367	3.70	128.01	50.28	412	4.15	143.58	56.40
368	3.71	128.36	50.42	413	4.16	143.93	56.54

414	4.17	144.28	56.68	459	4.62	159.85	62.80
415	4.18	144.62	56.81	460	4.63	160.19	62.93
416	4.19	144.97	56.95	461	4.64	160.54	63.07
417	4.20	145.31	57.08	462	4.65	160.88	63.20
418	4.21	145.66	57.22	463	4.66	161.23	63.34
419	4.22	146.01	57.36	464	4.67	161.58	63.48
420	4.23	146.35	57.49	465	4.68	161.92	63.61
421	4.24	146.70	57.63	466	4.69	162.27	63.75
422	4.25	147.04	57.76	467	4.70	162.61	63.88
423	4.26	147.39	57.90	468	4.71	162.96	64.02
424	4.27	147.74	58.04	469	4.72	163.31	64.16
425	4.28	148.08	58.17	470	4.73	163.65	64.29
426	4.29	148.43	58.31	471	4.74	164.00	64.43
427	4.30	148.77	58.44	472	4.75	164.34	64.56
428	4.31	149.12	58.58	473	4.76	164.69	64.70
429	4.32	149.47	58.72	474	4.77	165.04	64.84
430	4.33	149.81	58.85	475	4.78	165.38	64.97
431	4.34	150.16	58.99	476	4.79	165.73	65.11
432	4.35	150.50	59.12	477	4.80	166.07	65.24
433	4.36	150.85	59.26	478	4.81	166.42	65.38
434	4.37	151.20	59.40	479	4.82	166.77	65.52
435	4.38	151.54	59.53	480	4.83	167.11	65.65
436	4.39	151.89	59.67	481	4.84	167.46	65.79
437	4.40	152.23	59.80	482	4.85	167.80	65.92
438	4.41	152.58	59.94	483	4.86	168.15	66.06
439	4.42	152.93	60.08	484	4.87	168.50	66.20
440	4.43	153.27	60.21	485	4.88	168.84	66.33
441	4.44	153.62	60.35	486	4.89	169.19	66.47
442	4.45	153.96	60.48	487	4.90	169.53	66.60
443	4.46	154.31	60.62	488	4.91	169.88	66.74
444	4.47	154.66	60.76	489	4.92	170.23	66.88
445	4.48	155.00	60.89	490	4.93	170.57	67.01
446	4.49	155.35	61.03	491	4.94	170.92	67.15
447	4.50	155.69	61.16	492	4.95	171.26	67.28
448	4.51	156.04	61.30	493	4.96	171.61	67.42
449	4.52	156.39	61.44	494	4.97	171.96	67.56
450	4.53	156.73	61.57	495	4.98	172.30	67.69
451	4.54	157.08	61.71	496	4.99	172.65	67.83
452	4.55	157.42	61.84	497	5.00	172.99	67.96
453	4.56	157.77	61.98	498	5.01	173.34	68.10
454	4.57	158.12	62.12	499	5.02	173.69	68.24
455	4.58	158.46	62.25	500	5.03	174.03	68.37
456	4.59	158.81	62.39	501	5.04	174.38	68.51
457	4.60	159.15	62.52	502	5.05	174.72	68.64
458	4.61	159.50	62.66	503	5.06	175.07	68.78

504	5.07	175.42	68.92	549	5.52	190.99	75.04
505	5.08	175.76	69.05	550	5.53	191.33	75.17
506	5.09	176.11	69.19	551	5.54	191.68	75.31
507	5.10	176.45	69.32	552	5.55	192.02	75.44
508	5.11	176.80	69.46	553	5.56	192.37	75.58
509	5.12	177.15	69.60	554	5.57	192.72	75.72
510	5.13	177.49	69.73	555	5.58	193.06	75.85
511	5.14	177.84	69.87	556	5.59	193.41	75.99
512	5.15	178.18	70.00	557	5.60	193.75	76.12
513	5.16	178.53	70.14	558	5.61	194.10	76.26
514	5.17	178.88	70.28	559	5.62	194.45	76.40
515	5.18	179.22	70.41	560	5.63	194.79	76.53
516	5.19	179.57	70.55	561	5.64	195.14	76.67
517	5.20	179.91	70.68	562	5.65	195.48	76.80
518	5.21	180.26	70.82	563	5.66	195.83	76.94
519	5.22	180.61	70.96	564	5.67	196.18	77.08
520	5.23	180.95	71.09	565	5.68	196.52	77.21
521	5.24	181.30	71.23	566	5.69	196.87	77.35
522	5.25	181.64	71.36	567	5.70	197.21	77.48
523	5.26	181.99	71.50	568	5.71	197.56	77.62
524	5.27	182.34	71.64	569	5.72	197.91	77.76
525	5.28	182.68	71.77	570	5.73	198.25	77.89
526	5.29	183.03	71.91	571	5.74	198.60	78.03
527	5.30	183.37	72.04	572	5.75	198.94	78.16
528	5.31	183.72	72.18	573	5.76	199.29	78.30
529	5.32	184.07	72.32	574	5.77	199.64	78.44
530	5.33	184.41	72.45	575	5.78	199.98	78.57
531	5.34	184.76	72.59	576	5.79	200.33	78.71
532	5.35	185.10	72.72	577	5.80	200.67	78.84
533	5.36	185.45	72.86	578	5.81	201.02	78.98
534	5.37	185.80	73.00	579	5.82	201.37	79.12
535	5.38	186.14	73.13	580	5.83	201.71	79.25
536	5.39	186.49	73.27	581	5.84	202.06	79.39
537	5.40	186.83	73.40	582	5.85	202.40	79.52
538	5.41	187.18	73.54	583	5.86	202.75	79.66
539	5.42	187.53	73.68	584	5.87	203.10	79.80
540	5.43	187.87	73.81	585	5.88	203.44	79.93
541	5.44	188.22	73.95	586	5.89	203.79	80.07
542	5.45	188.56	74.08	587	5.90	204.13	80.20
543	5.46	188.91	74.22	588	5.91	204.48	80.34
544	5.47	189.26	74.36	589	5.92	204.83	80.48
545	5.48	189.60	74.49	590	5.93	205.17	80.61
546	5.49	189.95	74.63	591	5.94	205.52	80.75
547	5.50	190.29	74.76	592	5.95	205.86	80.88
548	5.51	190.64	74.90	593	5.96	206.21	81.02

594	5.97	206.56	81.16	639	6.42	222.13	87.28
595	5.98	206.90	81.29	640	6.43	222.47	87.41
596	5.99	207.25	81.43	641	6.44	222.82	87.55
597	6.00	207.59	81.56	642	6.45	223.16	87.68
598	6.01	207.94	81.70	643	6.46	223.51	87.82
599	6.02	208.29	81.84	644	6.47	223.86	87.96
600	6.03	208.63	81.97	645	6.48	224.20	88.09
601	6.04	208.98	82.11	646	6.49	224.55	88.23
602	6.05	209.32	82.24	647	6.50	224.89	88.36
603	6.06	209.67	82.38	648	6.51	225.24	88.50
604	6.07	210.02	82.52	649	6.52	225.59	88.64
605	6.08	210.36	82.65	650	6.53	225.93	88.77
606	6.09	210.71	82.79	651	6.54	226.28	88.91
607	6.10	211.05	82.92	652	6.55	226.62	89.04
608	6.11	211.40	83.06	653	6.56	226.97	89.18
609	6.12	211.75	83.20	654	6.57	227.32	89.32
610	6.13	212.09	83.33	655	6.58	227.66	89.45
611	6.14	212.44	83.47	656	6.59	228.01	89.59
612	6.15	212.78	83.60	657	6.60	228.35	89.72
613	6.16	213.13	83.74	658	6.61	228.70	89.86
614	6.17	213.48	83.88	659	6.62	229.05	90.00
615	6.18	213.82	84.01	660	6.63	229.39	90.13
616	6.19	214.17	84.15	661	6.64	229.74	90.27
617	6.20	214.51	84.28	662	6.65	230.08	90.40
618	6.21	214.86	84.42	663	6.66	230.43	90.54
619	6.22	215.21	84.56	664	6.67	230.78	90.68
620	6.23	215.55	84.69	665	6.68	231.12	90.81
621	6.24	215.90	84.83	666	6.69	231.47	90.95
622	6.25	216.24	84.96	667	6.70	231.81	91.08
623	6.26	216.59	85.10	668	6.71	232.16	91.22
624	6.27	216.94	85.24	669	6.72	232.51	91.36
625	6.28	217.28	85.37	670	6.73	232.85	91.49
626	6.29	217.63	85.51	671	6.74	233.20	91.63
627	6.30	217.97	85.64	672	6.75	233.54	91.76
628	6.31	218.32	85.78	673	6.76	233.89	91.90
629	6.32	218.67	85.92	674	6.77	234.24	92.04
630	6.33	219.01	86.05	675	6.78	234.58	92.17
631	6.34	219.36	86.19	676	6.79	234.93	92.31
632	6.35	219.70	86.32	677	6.80	235.27	92.44
633	6.36	220.05	86.46	678	6.81	235.62	92.58
634	6.37	220.40	86.60	679	6.82	235.97	92.72
635	6.38	220.74	86.73	680	6.83	236.31	92.85
636	6.39	221.09	86.87	681	6.84	236.66	92.99
637	6.40	221.43	87.00	682	6.85	237.00	93.12
638	6.41	221.78	87.14	683	6.86	237.35	93.26

684	6.87	237.70	93.40	729	7.32	253.27	99.52
685	6.88	238.04	93.53	730	7.33	253.61	99.65
686	6.89	238.39	93.67	731	7.34	253.96	99.79
687	6.90	238.73	93.80	732	7.35	254.30	99.92
688	6.91	239.08	93.94	733	7.36	254.65	100.06
689	6.92	239.43	94.08	734	7.37	255.00	100.20
690	6.93	239.77	94.21	735	7.38	255.34	100.33
691	6.94	240.12	94.35	736	7.39	255.69	100.47
692	6.95	240.46	94.48	737	7.40	256.03	100.60
693	6.96	240.81	94.62	738	7.41	256.38	100.74
694	6.97	241.16	94.76	739	7.42	256.73	100.88
695	6.98	241.50	94.89	740	7.43	257.07	101.01
696	6.99	241.85	95.03	741	7.44	257.42	101.15
697	7.00	242.19	95.16	742	7.45	257.76	101.28
698	7.01	242.54	95.30	743	7.46	258.11	101.42
699	7.02	242.89	95.44	744	7.47	258.46	101.56
700	7.03	243.23	95.57	745	7.48	258.80	101.69
701	7.04	243.58	95.71	746	7.49	259.15	101.83
702	7.05	243.92	95.84	747	7.50	259.49	101.96
703	7.06	244.27	95.98	748	7.51	259.84	102.10
704	7.07	244.62	96.12	749	7.52	260.19	102.24
705	7.08	244.96	96.25	750	7.53	260.53	102.37
706	7.09	245.31	96.39	751	7.54	260.88	102.51
707	7.10	245.65	96.52	752	7.55	261.22	102.64
708	7.11	246.00	96.66	753	7.56	261.57	102.78
709	7.12	246.35	96.80	754	7.57	261.92	102.92
710	7.13	246.69	96.93	755	7.58	262.26	103.05
711	7.14	247.04	97.07	756	7.59	262.61	103.19
712	7.15	247.38	97.20	757	7.60	262.95	103.32
713	7.16	247.73	97.34	758	7.61	263.30	103.46
714	7.17	248.08	97.48	759	7.62	263.65	103.60
715	7.18	248.42	97.61	760	7.63	263.99	103.73
716	7.19	248.77	97.75	761	7.64	264.34	103.87
717	7.20	249.11	97.88	762	7.65	264.68	104.00
718	7.21	249.46	98.02	763	7.66	265.03	104.14
719	7.22	249.81	98.16	764	7.67	265.38	104.28
720	7.23	250.15	98.29	765	7.68	265.72	104.41
721	7.24	250.50	98.43	766	7.69	266.07	104.55
722	7.25	250.84	98.56	767	7.70	266.41	104.68
723	7.26	251.19	98.70	768	7.71	266.76	104.82
724	7.27	251.54	98.84	769	7.72	267.11	104.96
725	7.28	251.88	98.97	770	7.73	267.45	105.09
726	7.29	252.23	99.11	771	7.74	267.80	105.23
727	7.30	252.57	99.24	772	7.75	268.14	105.36
728	7.31	252.92	99.38	773	7.76	268.49	105.50

774	7.77	268.84	105.64	819	8.22	284.41	111.76
775	7.78	269.18	105.77	820	8.23	284.75	111.89
776	7.79	269.53	105.91	821	8.24	285.10	112.03
777	7.80	269.87	106.04	822	8.25	285.44	112.16
778	7.81	270.22	106.18	823	8.26	285.79	112.30
779	7.82	270.57	106.32	824	8.27	286.14	112.44
780	7.83	270.91	106.45	825	8.28	286.48	112.57
781	7.84	271.26	106.59	826	8.29	286.83	112.71
782	7.85	271.60	106.72	827	8.30	287.17	112.84
783	7.86	271.95	106.86	828	8.31	287.52	112.98
784	7.87	272.30	107.00	829	8.32	287.87	113.12
785	7.88	272.64	107.13	830	8.33	288.21	113.25
786	7.89	272.99	107.27	831	8.34	288.56	113.39
787	7.90	273.33	107.40	832	8.35	288.90	113.52
788	7.91	273.68	107.54	833	8.36	289.25	113.66
789	7.92	274.03	107.68	834	8.37	289.60	113.80
790	7.93	274.37	107.81	835	8.38	289.94	113.93
791	7.94	274.72	107.95	836	8.39	290.29	114.07
792	7.95	275.06	108.08	837	8.40	290.63	114.20
793	7.96	275.41	108.22	838	8.41	290.98	114.34
794	7.97	275.76	108.36	839	8.42	291.33	114.48
795	7.98	276.10	108.49	840	8.43	291.67	114.61
796	7.99	276.45	108.63	841	8.44	292.02	114.75
797	8.00	276.79	108.76	842	8.45	292.36	114.88
798	8.01	277.14	108.90	843	8.46	292.71	115.02
799	8.02	277.49	109.04	844	8.47	293.06	115.16
800	8.03	277.83	109.17	845	8.48	293.40	115.29
801	8.04	278.18	109.31	846	8.49	293.75	115.43
802	8.05	278.52	109.44	847	8.50	294.09	115.56
803	8.06	278.87	109.58	848	8.51	294.44	115.70
804	8.07	279.22	109.72	849	8.52	294.79	115.84
805	8.08	279.56	109.85	850	8.53	295.13	115.97
806	8.09	279.91	109.99	851	8.54	295.48	116.11
807	8.10	280.25	110.12	852	8.55	295.82	116.24
808	8.11	280.60	110.26	853	8.56	296.17	116.38
809	8.12	280.95	110.40	854	8.57	296.52	116.52
810	8.13	281.29	110.53	855	8.58	296.86	116.65
811	8.14	281.64	110.67	856	8.59	297.21	116.79
812	8.15	281.98	110.80	857	8.60	297.55	116.92
813	8.16	282.33	110.94	858	8.61	297.90	117.06
814	8.17	282.68	111.08	859	8.62	298.25	117.20
815	8.18	283.02	111.21	860	8.63	298.59	117.33
816	8.19	283.37	111.35	861	8.64	298.94	117.47
817	8.20	283.71	111.48	862	8.65	299.28	117.60
818	8.21	284.06	111.62	863	8.66	299.63	117.74

864	8.67	299.98	117.88	909	9.12	315.55	124.00
865	8.68	300.32	118.01	910	9.09	314.51	123.59
866	8.69	300.67	118.15	911	9.10	314.85	123.72
867	8.70	301.01	118.28	912	9.11	315.20	123.86
868	8.71	301.36	118.42	913	9.12	315.55	124.00
869	8.72	301.71	118.56	914	9.13	315.89	124.13
870	8.73	302.05	118.69	915	9.14	316.24	124.27
871	8.74	302.40	118.83	916	9.15	316.58	124.40
872	8.75	302.74	118.96	917	9.16	316.93	124.54
873	8.76	303.09	119.10	918	9.17	317.28	124.68
874	8.77	303.44	119.24	919	9.18	317.62	124.81
875	8.78	303.78	119.37	920	9.19	317.97	124.95
876	8.79	304.13	119.51	921	9.20	318.31	125.08
877	8.80	304.47	119.64	922	9.21	318.66	125.22
878	8.81	304.82	119.78	923	9.22	319.01	125.36
879	8.82	305.17	119.92	924	9.23	319.35	125.49
880	8.83	305.51	120.05	925	9.24	319.70	125.63
881	8.84	305.86	120.19	926	9.25	320.04	125.76
882	8.85	306.20	120.32	927	9.26	320.39	125.90
883	8.86	306.55	120.46	928	9.27	320.74	126.04
884	8.87	306.90	120.60	929	9.28	321.08	126.17
885	8.88	307.24	120.73	930	9.29	321.43	126.31
886	8.89	307.59	120.87	931	9.30	321.77	126.44
887	8.90	307.93	121.00	932	9.31	322.12	126.58
888	8.91	308.28	121.14	933	9.32	322.47	126.72
889	8.92	308.63	121.28	934	9.33	322.81	126.85
890	8.93	308.97	121.41	935	9.34	323.16	126.99
891	8.94	309.32	121.55	936	9.35	323.50	127.12
892	8.95	309.66	121.68	937	9.36	323.85	127.26
893	8.96	310.01	121.82	938	9.37	324.20	127.40
894	8.97	310.36	121.96	939	9.38	324.54	127.53
895	8.98	310.70	122.09	940	9.39	324.89	127.67
896	8.99	311.05	122.23	941	9.40	325.23	127.80
897	9.00	311.39	122.36	942	9.41	325.58	127.94
898	9.01	311.74	122.50	943	9.42	325.93	128.08
899	9.02	312.09	122.64	944	9.43	326.27	128.21
900	9.03	312.43	122.77	945	9.44	326.62	128.35
901	9.04	312.78	122.91	946	9.45	326.96	128.48
902	9.05	313.12	123.04	947	9.46	327.31	128.62
903	9.06	313.47	123.18	948	9.47	327.66	128.76
904	9.07	313.82	123.32	949	9.48	328.00	128.89
905	9.08	314.16	123.45	950	9.49	328.35	129.03
906	9.09	314.51	123.59	951	9.50	328.69	129.16
907	9.10	314.85	123.72	952	9.51	329.04	129.30
908	9.11	315.20	123.86	953	9.52	329.39	129.44

954	9.53	329.73	129.57	978	9.77	338.04	132.84
955	9.54	330.08	129.71	979	9.78	338.38	132.97
956	9.55	330.42	129.84	980	9.79	338.73	133.11
957	9.56	330.77	129.98	981	9.80	339.07	133.24
958	9.57	331.12	130.12	982	9.81	339.42	133.38
959	9.58	331.46	130.25	983	9.82	339.77	133.52
960	9.59	331.81	130.39	984	9.83	340.11	133.65
961	9.60	332.15	130.52	985	9.84	340.46	133.79
962	9.61	332.50	130.66	986	9.85	340.80	133.92
963	9.62	332.85	130.80	987	9.86	341.15	134.06
964	9.63	333.19	130.93	988	9.87	341.50	134.20
965	9.64	333.54	131.07	989	9.88	341.84	134.33
966	9.65	333.88	131.20	990	9.89	342.19	134.47
967	9.66	334.23	131.34	991	9.90	342.53	134.60
968	9.67	334.58	131.48	992	9.91	342.88	134.74
969	9.68	334.92	131.61	993	9.92	343.23	134.88
970	9.69	335.27	131.75	994	9.93	343.57	135.01
971	9.70	335.61	131.88	995	9.94	343.92	135.15
972	9.71	335.96	132.02	996	9.95	344.26	135.28
973	9.72	336.31	132.16	997	9.96	344.61	135.42
974	9.73	336.65	132.29	998	9.97	344.96	135.56
975	9.74	337.00	132.43	999	9.98	345.30	135.69
976	9.75	337.34	132.56	1000	9.99	345.65	135.83
977	9.76	337.69	132.70	1001	10.00	345.99	135.96

About the divider

Divider (X-Over):
This device is equipped with an active divider. The divider can limit the frequency reaching each output. Each sound channel can be controlled separately. Therefore, optimized frequency may be used to drive each pair of speakers.
The divider can be used to adjust the HPF (high-pass filter) or LPF (low-pass filter) of each waveband and the slope (the speed of the filter towards the peak or valley).
Adjustment should be made based on the reproduction characteristics of the speakers. Depending on the speaker, the use of a passive network may not be needed. If you are not sure about this, please consult the authorized Alpine dealer.

Active division by 2 mode

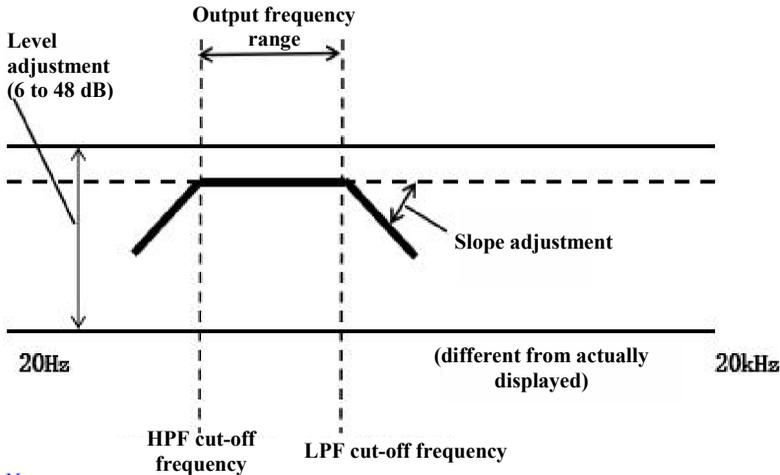|	Cut-off frequency (level difference is 1/3 octave band)		Slope	
	High-pass filter (HPF)	Low-pass filter (LPF)	High-pass filter (HPF)	Low-pass filter (LPF)
Subwoofer	- - - -	20Hz-800Hz	- - - -	6/12/18/24/30/36/42/48dB/oct.
Rear (high-frequency) speaker	20Hz-800Hz	20Hz-20kHz	6/12/18/24/30/36/42/48dB/oct.	6/12/18/24/30/36/42/48dB/oct.
Front (high-frequency) speaker	1kHz-20kHz	- - - -	6/12/18/24/30/36/42/48dB/oct.	- - - -
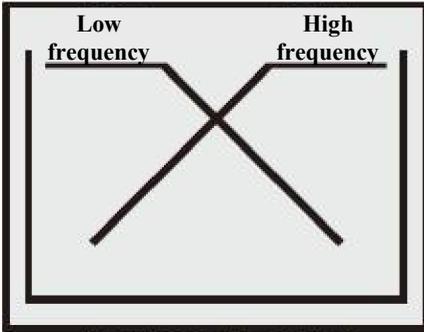
(different from actually displayed)

Active division by 3 mode

	Cut-off frequency (level difference is 1/3 octave band)		Slope	
	High-pass filter (HPF)	Low-pass filter (LPF)	High-pass filter (HPF)	Low-pass filter (LPF)
Bass speaker	- - - -	20Hz-800Hz	- - - -	6/12/18/24/30/36/42/48dB/oct.
Alto high-pass speaker	20Hz-800Hz	20Hz-20kHz	6/12/18/24/30/36/42/48dB/oct.	6/12/18/24/30/36/42/48dB/oct.
Alto low-pass speaker	20Hz-800Hz	20Hz-20kHz	6/12/18/24/30/36/42/48dB/oct.	6/12/18/24/30/36/42/48dB/oct.
Treble speaker	lkHz-20kHz	- - - -	6/12/18/24/30/36/42/48dB/oct.	- - - -

(different from actually displayed)

Output frequency range

Level adjustment (6 to 48 dB)

Slope adjustment

20Hz

(different from actually displayed)

20kHz

HPF cut-off frequency

LPF cut-off frequency

Note:
- *HPF (high-pass filter): intercept low frequency signals and allow pass of high frequency signals*
- *LPF (high-pass filter): intercept high frequency signals and allow pass of low frequency signals*
- *Slope: level change of one octave frequency change (dB).*
- *The larger the slope value, the steeper the slope.*
- *Please do not use a treble speaker that has not set HPF to on or has been set to low frequency; otherwise, it may damage the speaker due to low frequency contents.*
- *It is impossible to adjust the frequency of the divider to higher than HPF or lower than LPF.*
- *Adjustment should be made according to the recommended divider frequency for the speaker connected. Please identify the recommended divider frequency of the speaker. Adjustment to a value out of the recommended frequency range may damage the speaker.*
- *Under no circumstances shall Alpine be liable for any damage or failure of the speaker caused by using the divider with a frequency value out of the recommended range.*

Divider setting

1 In the setting interface, press and hold ▶▶, ▶/Ⅱ, ◀◀ for more than 2 seconds one by one.
2 Turn the knob to select "Active division by 3" or "Active division by 2" mode.
3 Follow the prompts on the screen and press ▶/Ⅱ to confirm the selected content.

About active division mode

Frequency range is output with high frequency for front/rear speakers and low frequency for subwoofers.
Active division by 2 mode

Front (high-frequency) speaker   Front (high-frequency) speaker

Rear (high-frequency) speaker   Rear (high-frequency) speaker

Subwoofer   Subwoofer
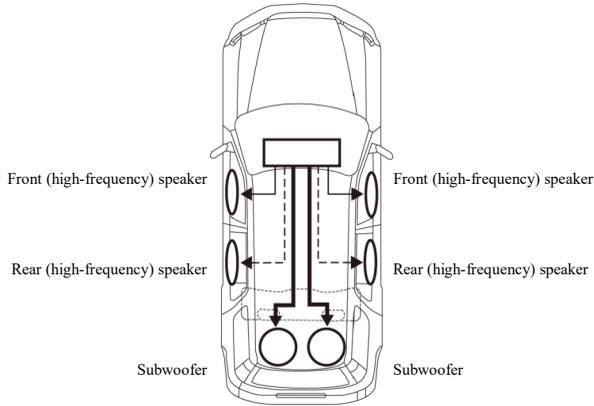
Frequency range is output with high/medium frequency for the front speaker and low frequency for the bass speaker.
Active division by 3 mode

Treble speaker   Treble speaker

Alto speaker   Alto speaker

Bass speaker   Bass speaker
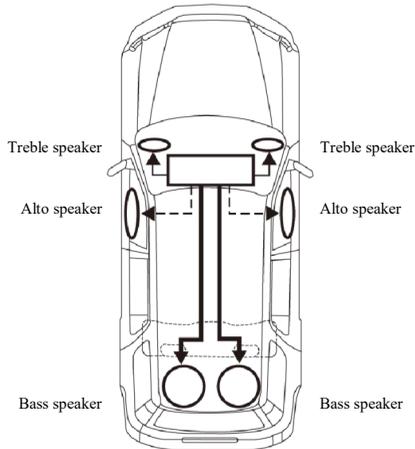
Output of the device:

———————— **Front output**

– – – – – – – **Rear output**

━━━━━━ **Bass output**

Note:
  • *When the device is set to Active Division by 3 modes, "Fader" output cannot be adjusted.*

Setting

Knob
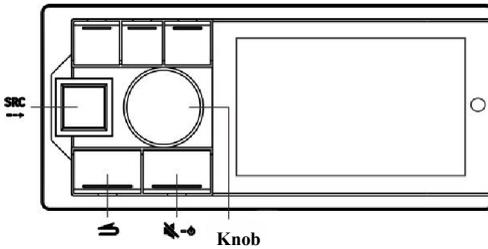
Setting

You can set this device flexibly based on your preference and purpose. In the general setting menu, you can change the general settings, display settings and so on.

Use steps 1 to 5 to choose any setting mode to change the setting. For a detailed description of the selected setting items, please refer to the applicable sections below.

1 Press and hold the knob for at least 2 seconds to enter the settings interface.
2 Turn the knob to select the desired item and then press the knob.
   Preset Equalizer ↔ Sound Effect Setting ↔ Sound Effect Clear Setting ↔ General ↔ Bluetooth
3 Turn the knob to select General, and then press the knob.
   Auxiliary audio source ↔ Language setting ↔ Dimmer control ↔ About ↔ Alpine system matching ↔ Steering wheel control learning ↔ Built-in power amplifier ↔ Coax/Fiber ↔ Restore factory settings
4 Turn the knob to change the setting and then press the knob.
5 Press SRC/⏻ to deactivate setting mode.
6 In the setting interface, press and hold ▶▶ for a while, press and hold the knob for a while, and press and hold ◀◀ for more than 2 seconds to recall the electrical test mode.
   Firmware update ↔ Dealer setting ↔ Serial number

Note:
   • *Press ⤺ to go back to the previous setting mode.*

General setting

Select "General" in the setting main menu.

Auxiliary sound source

You can choose the auxiliary audio source as needed. Primary source attenuation is used to set the amount of attenuation needed for the primary source when mixed sources are input.
   Setting item: Auxiliary sound source
   Setting contents: Auxiliary audio source options: Bluetooth ↔ High level ↔ AUX ↔ Off
                        Primary source attenuation: 0, 30%, 50% (initial setting), 80%, 100%

Language setting

You can choose the interface display in Chinese or English based on your personal preference.
   Setting item: Language setting
   Setting contents: Simplified Chinese (initial setting)/English

Dimmer control

When dimmer control is set to "Manual", the light level can be adjusted. When dimmer control is set to "Auto", the illuminating brightness of the host controller will be reduced when the headlights of the vehicle are ON. If you think the backlight of the host controller is too bright in the nighttime, this mode is very useful.

    Setting item: Dimmer control
    Setting contents: Dimmer mode: Auto/Manual (initial setting)
                                Dimmer level: level 1/level 2/level 3(initial setting)
                                Black screen setting*: Off (initial setting)/On

When this function is enabled, the screen will turn off after 30 seconds of no operation. Press any button and the screen will turn on.

About this device

Here you can check information about this device, such as the version. Select "About," and you can view the following information.
Software version/Device version/Device name

Alpine system matching

It can be connected to Alpine on-board DSP and only supports products with matching controller interface, such as PXE-R600, PXE-0850X, or PXE-X09.

    Setting item: External DSP*
    Setting contents: Off (initial setting)/On
                                Total volume: 0~35 (initial value: 27)
                                Primary source: Digital ↔ High level ↔ Bluetooth ↔ AUX
                                Auxiliary source: Digital ↔ High level ↔ Bluetooth ↔ AUX ↔ Off
                                Mega bass: -60dB~0dB (initial value: 0 dB)
                                Sound effect: 6 sets of preset sound effects can be recalled

For the above external DSP, refer to the settings on the connection of PXE-0850X. For details, please contact your Alpine dealer.

Steering wheel controller learning

    Setting item: steering wheel controller learning
    Setting contents: wire the steering wheel controller depending on the actual vehicle model*. After connecting the host machine, allow the device to learn the steering wheel through the controller. Press "Volume +", "Volume -", "Previous", "Next", "Play/Pause", and "Mute" and wait for the buttons on the steering wheel to be pressed down to finish the learning and achieve control of the steering wheel with the controller.
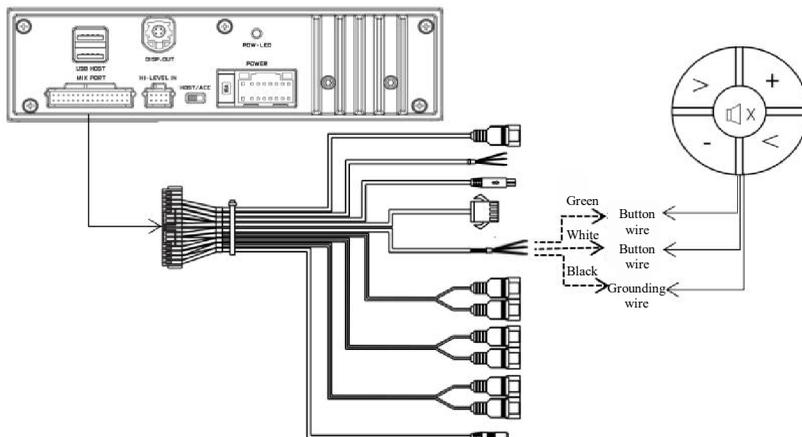
Connect the green and white wires with the button wires of the steering wheel and connect the black wire with the grounding wire. Please connect the wires based on the actual vehicle model. For details, please

*contact your Alpine dealer.*

Built-in power amplifier

When connected to an external amplifier, sound quality can be improved by stopping the power supply to the built-in amplifier.

    Setting item: Built-in power amplifier
    Setting contents: Off/On (initial setting)

        Off: WHEN USING THE PRE-OUTPUT OF THIS DEVICE TO DRIVE THE EXTERNAL AMPLIFIER, PLEASE USE THIS MODE. IN THIS SETTING, THE BUILT-IN AMPLIFIER IN THE HOST MACHINE WILL BE TURNED OFF AND CANNOT DRIVE THE SPEAKERS.

        On: The speakers are driven by the built-in amplifier.
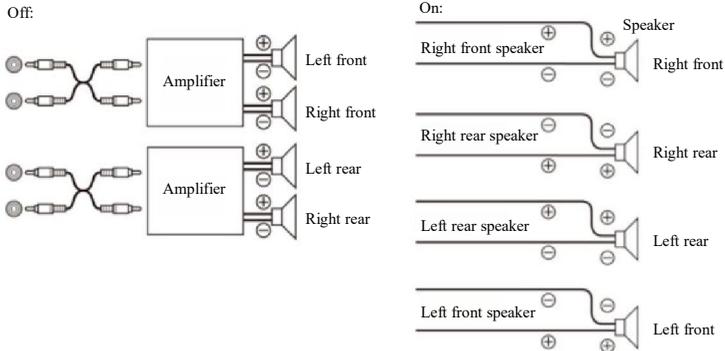
Note:
- *When the "built-in amplifier" is set to "Off", the system will not output any sound.*

Coax/Fiber

Enable this function when the device is connected to a power amplifier or audio process.

    Setting item: Coax/Fiber
    Setting content: Off/On (initial setting)

Restore factory settings

After restoring factory settings, except for the tuned "Dealer Settings", all setting items will be restored to the factory default value.

    Setting item: Restore factory settings

Electrical test mode

Setting item:	In the setting interface of the electrical test mode, press and hold ▶▶ for a while, press and hold the knob for a while, and press and hold ◀◀ for a while to recall the electrical test mode.
Setting contents:	Firmware update: enter the firmware update interface, select firmware update file and then press Confirm shortly to update the firmware. Dealer Settings: short press the knob to save dealer settings Serial number: you can view the serial number of the device

Bluetooth function
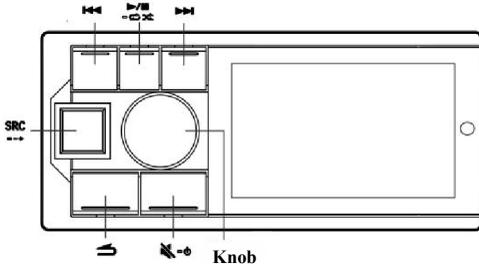
About Bluetooth

Bluetooth is a wireless technology used for short distance communication between mobile devices and PCs. It can realize data transmission between Bluetooth compatible devices
. If the distance between two devices is less than 10 meters, they can transmit data with Bluetooth within the approved 2.4 GHz frequency spectrum.

Note:
- *Depending on the Bluetooth version, Bluetooth compatible devices may be unable to communicate with this device.*
- *It is not guaranteed that this device can be used normally in conjunction with all Bluetooth compatible devices. For the operation of Bluetooth compatible devices, please consult your Alpine dealer or visit Alpine's website.*
- *Depending on the environment, Bluetooth wireless connection may be unstable.*
- *Depending on the Bluetooth compatible device connected, this function may vary. Please also refer to the user manual of the device connected.*
- *When searching this device on the mobile phone, the name of this device is "UTX-M08S-XXXXXX".*

Connect via Bluetooth

When the host machine is powered on for the first time and is not connected to any device via Bluetooth, you need to wait for the mobile phone to pair and connect it. Search "UTX-M08S-XXXXXX" directly on the mobile phone background. "XXXXXX" is a 6-digit random code; for example, UTX-M08S-A00414.

1 Enable Bluetooth on the mobile phone.
2 Search pairable devices on the mobile phone background, select "UTX-M08S-XXXXXX" to pair (no pairing code required).
3 After pairing successfully, press and hold the knob for a while to enter the Setting interface → General → Bluetooth (for a detailed operation, refer to "Sound Settings"). Press "Bluetooth" to enter the interface, which shows "Connected".
4 If you need to disconnect the Bluetooth device, press "Connected" shortly with the knob and it will prompt the user to "Confirm to disconnect the Bluetooth device". Press it shortly again to confirm. After disconnection, it will show "Disconnected". After disconnection, if you need to connect the Bluetooth again, perform step 2.

Note:
- *This device can only pair one Bluetooth compatible device at a time and cannot be connected to two Bluetooth compatible devices at the same time.*

Bluetooth music

1 Press **SRC/⏻** to choose Bluetooth music.
2 Press ⏮ to select the previous song.
3 Press ⏭ to select the next song.

4 Press ►/II/–⇄⤭ to switch between pause and play.

Note:
- *This operation varies depending on the device connected.*
- *This device has separate memory for volume settings of Bluetooth audio sources.*

Information

When a problem occurs

If you encounter any problem, please turn off the power and turn it on again. If the device still cannot work, please check the items in the table below. If the device fails, this manual will help you solve the problem. Otherwise, please confirm that your system is connected correctly or consult your Alpine authorized dealer.

Common problems

Function cannot be used or displayed.
- The ignition switch of the vehicle is off.
  – If connected as per the instructions, this device will not run when the vehicle's ignition switch is off.
- Power cord (red) and battery wire (yellow) are connected incorrectly.
  – Check the wiring of the power cord and battery wire.
- The fuse blows out.
  – Check the fuse of the device. If needed, replace it with a new fuse with appropriate specifications.
- Failure occurs to the microcomputer inside due to interfering noise and so on.
  – Press RESET with a ballpoint or other pointed object.

MP3/WMA/ACC/M4A/WAV/FLAC/APE/DSD

Cannot play MP3/WMA/ACC/M4A/WAV/FLAC/APE/DSD.
- Write error occurs. MP3/WMA/ACC/M4A/WAV/FLAC/APE/DSD format not compatible.
  – Ensure writing of MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD in a supported format. Please refer to "About MP3/WMA/AAC/M4A/WAV/FLAC/APE/DSD" and write again with a format supported by this device.

Audio

Sound is not output from the speaker.
- The built-in amplifier does not output a signal.
  – The switch of the built-in power amplifier has been turned to "Off".

Instructions for USB storage

USB transmission error

- Communication failure or startup failure etc.
  – The problem can be solved by turning off/on ACC.

Over current

- The USB connector has an abnormal current.
  – The problem can be solved by turning off/on ACC.

Device not supported

• A USB device not supported by this device is connected.
  – Connect USB devices supported by this device; for example, USB flash disk, mobile hard disk drive or USB HUB.

The device has no response

• The USB device has no response.
  – Please reinsert the USB device.

Please insert a USB device

• No USB storage is connected.
  – Make sure that a USB storage is correctly connected and the cable is not overbent.

No songs

• There are no songs (files) in the USB storage.
  – Connect a USB storage device with songs (files) in it.

This file format is not supported

• A file that is not supported by this device is used.
  – Use files supported by this device; for example, files with extensions of "mp3", "wma", "acc", "m4a", "wav", "flac", "ape", "dsd" ("dff" and "dsf").

Protected file

• A WMA file with copy protection is played.
  – The device can only play files without copy protection.

Bluetooth mode

Device not connected

• No Bluetooth device is connected.
  – Connect a Bluetooth device.

No songs

• There are no songs on the Bluetooth device.
  – Please download songs to the Bluetooth device.

Specifications

USB

Interface	USB 2.0
Capacity	Maximum capacity supported 2 TB
Maximum power consumption	1.5A
File system	FAT16/32, NTFS, exFAT
Maximum number of playable songs (total number of songs in the front and rear USB storage)	10,000 songs
PCM encoding	192kHz, 16~24bit
MP3 decoding	MPEG Audio Layer-3
WMA decoding	Windows Media™ audio
AAC decoding	".m4a" file in AAC-LC format
M4A decoding	MPEG Audio Layer-4
WAV decoding	waveform audio file
FLA decoding	Free Lossless Audio Codec
APE decoding	Monkey's Audio
DSD decoding	Direct Stream Digital (DSD64,DSD128,DSD256)

Bluetooth

Supported audio format	AAC/SBC

General

System sampling rate	96 kHz/24 bit
Power supply requirements	14.4V DC (allowable 9~16V)
Controller screen	2.4 inches color TFT display (480×320)
Net weight	0.77kg

Dimensions of host machine

Length	178mm
Width	143mm
Height	50mm

Dimensions of controller

Length	110mm
Width	50mm
Height	15mm

Note:

- *Due to continuous improvement of the product, the specifications and design may be subject to changes without notice.*

Performance parameters

Dynamic range	≥110dB
Signal to noise ratio	AUX≥100dB
Background noise	High level≤-75dBu; AUX≤-95dBu
Channel resolution	≥80dB
THD	≤0.01%
Input voltage	High level: 26Vpp; AUX: 8Vpp
Output voltage	12Vpp
Rated power	4CH×25W(4Ω，14.4V,1kHz,10%THD)
Maximum power	4CH×50W(4Ω,14.4V,1kHz,10%THD)
Input / output sensitivity	AUX≥1:1.5
Frequency response	20Hz~40kHz
Input impedance	High level: 51Ω; AUX: 20KΩ
Output impedance	51Ω
Quiescent current	≤3mA (in off state)
Stand-by power consumption	≤0.1W
REM startup input	ACC or high level (FL-/FL+)
REM startup output	12V (0.2A)
Uptime	18s
Operating ambient temperature	-20~60°C
Storage temperature	-40~85°C

Hazardous substances

Name and content of hazardous substances in the product

Component	Hazardous substance or element					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr(VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Circuit board assembly	×	○	○	○	○	○
Housing assembly	○	○	○	○	○	○
Display assembly	×	○	○	○	○	○
Accessory	×	○	○	○	○	○

This table is prepared in accordance with the requirements of SJ/T 11364.
○: indicates that the content of this hazardous substance in this component is below the limit specified by GB/T 26572.
×: indicates that the content of this hazardous substance in at least a homogeneous material of this component exceeds the limit specified by GB/T 26572.
For components marked with "×", the content exceeding the limit is because there is currently no mature alternative technology in the industry at present.

Installation and connection

Before installing or connecting this device, please read the following instructions and refer to "Operating Instructions" to ensure correct use.

⚠Warning

Please make correct connections.
Incorrect connection may result in fire or damage to this product.

Please only use the device on 12 V negative grounded vehicles.
(If you are not sure, please consult the agent for confirmation.) Otherwise, it may lead to an accident like a fire, etc.

Before wiring, please remove the cable connected to the negative terminal of the battery.
Otherwise, it may result in electric shock or injury due to a short circuit.

Please do not cut the cable.
Never strip the cable insulation to supply power to other devices. Otherwise, it may result in fire or electric shock by exceeding the rated load of the cable.

Please be careful not to damage the tubing or wire when drilling.
When drilling an installation hole on the chassis, please be especially careful not to touch, damage, or obstruct the tubing, oil line, fuel tank or wire. Otherwise, it may result in fire.

Please do not use a bolt or nut on the braking or steering system for grounding.
Bolts or nuts used on the braking or steering system (or any other safety related system) or the fuel tank should never be used for installation or connection of the grounding wire. Otherwise, it will cause the failure of vehicle control or fire and so on.

Small items like batteries should be kept out of the reach of children.
If ingested, it may result in severe injury. Once ingested, please seek medical attention immediately.

Please do not install the device at a place that will hinder the driving of the vehicle; for example, near the steering wheel or gear lever.

Otherwise, it may obstruct the view to the front or hinder the driving and cause a serious accident.

Please do not allow the cable to twist around surrounding objects.
Please arrange the cables and wire as per the instructions to avoid hindering the driving. Any cable or wire hindering or hanging on the steering wheel, gear lever, or brake pedal is very dangerous.

⚠Caution

Please do not install the device in a place under direct sunlight.
Otherwise, exposure to direct sunshine at high temperatures may damage the screen.

Please call the professionals for wiring and installation.
It needs professional expertise and experience to wire and install the device. Please contact the dealer from whom you bought the product to install it for safety.

Please use the specified accessories and perform installation in a safe manner.

Please make sure to use the specified accessories. Use of other parts may damage the inside of the device or result in failure to install the device firmly in place. This will result in the loosening of parts and lead to danger or product failure.

Please arrange the cables and wire properly to avoid compression or pinch by a sharp metal edge.
The installation path of cables and wires should be far from movable components (such as seat slide) or sharp metal edges to avoid cable and wire damage.
If a wire needs to pass through a hole in a metal part, please wrap it with a rubber washer to protect the wire insulation from being cut by the edge of the hole.

Please do not install the device in an extremely humid or dusty place.
Avoid installing the device in a place extremely susceptible to moisture or dust accumulation. Moisture or dust incursion into the inside of the device may cause the failure of the device.

⚠Precautions

- Before installing UTX-M08S, please make sure to disconnect the cable from the battery's negative terminal (-). This can reduce the chance of damage to this device in the case of a short circuit.
- Please make sure to connect the color coded wires as shown in the diagram. Incorrect connection may cause the failure of this device or damage to the electrical system of the vehicle.
- When connected to the vehicle's electrical system, please watch for the factory installed components (such as onboard computer). Please do not use these wires to supply power for this device.
  When connecting UTX-M08S to the fuse box, please make sure that the amperage of the circuit fuse used for UTX-M08S is appropriate. If not, it may result in damage to this device and/or the vehicle. For any questions, please consult your Alpine dealer.
- UTX-M08S uses a recessed RCA socket for connection with other devices with RCA connector (such as amplifier). You may need an adaptor for connection with other devices. If you need an adaptor, please contact your Alpine authorized dealer.
- Please make sure to connect the speaker (-) wire to the speaker (-) terminal. Be sure not to connect the wires of the left and right speakers to each other or the vehicle body.

Important notes

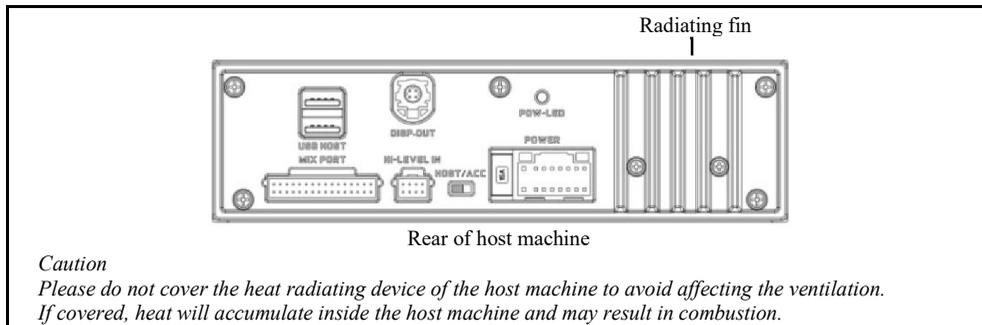| Please fill in the serial number of this device in the brackets and save it permanently. The serial number is on the label at the top of the device.	
Serial number: [	]
Installation date: [	]
Installation technician: [	]
Place of purchase: [	]

Installation

Install the host machine

Rear of host machine

Caution
Please do not cover the heat radiating device of the host machine to avoid affecting the ventilation.
If covered, heat will accumulate inside the host machine and may result in combustion.

For a detailed installation of the host machine, please contact the Alpine authorized dealer.

Install the host controller

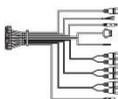### Preparation

1 Check the accessories
　① Power cord

　② High level input line

　③ USB extension cable (1.5 meters)

　④ Controller extension cable (2.5 meters)

　⑤ Complex line

　⑥ Mounting bracket

⑦ Self-tapping screws (M4×20)

⑧ Machine tooth screws (M5×8)

⑨ Host controller tray (used in reverse mold installation)

⑩ Large and small 3M tapes

Used in tray (reverse mold) installation or installation directly on the dashboard.

Precautions about host controller installation

- Check whether the cables provided are long enough. Please install the device in a place where it would not come in contact with water.
- Please do not install this device or wires in a place that hinders driving or the air bag; for example, the console or dashboard.
- Please make sure that the host controller is firmly fixed. If not firmed fixed, the host controller may fall off during driving.

Connection of USB storage (sold separated)

Connect USB storage

This device has one USB port in the front and two USB ports in the rear. You can connect a USB device to any port or connect two or three USB devices at the same time. However, you cannot connect two or more rechargeable devices at the same time. When connected to the rear USB port, the accompanied USB extension cable may be used.
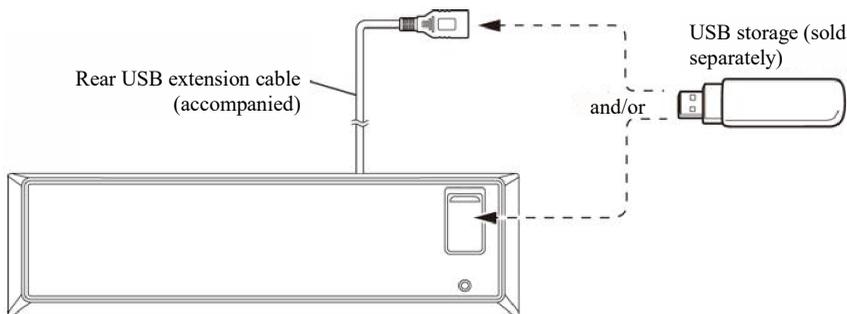
Note:
- *When removing the USB storage, please pull it out straightly.*
- *If no sound is output when a USB storage is connected or the USB storage is not recognized, please remove the USB storage and connect it again.*
- *Keep the USB cable far from other cables.*

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Connection
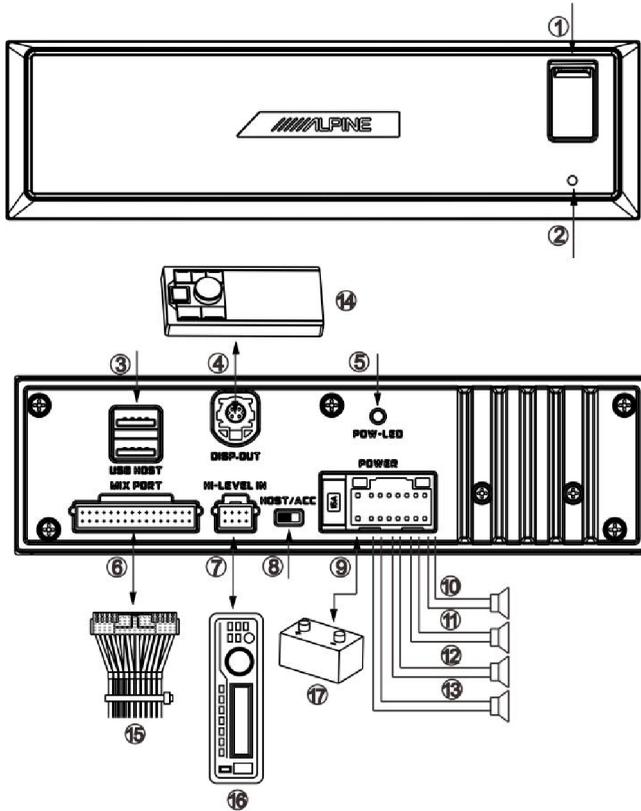
① Front USB ports: used to connect USB flash disk, mobile hard disk drive or USB HUB.
② RESET switch: Press and hold it for 3 seconds to restart the host machine.
③ Rear two USB ports: connect USB flash disk or mobile hard disk with the accompanied USB extension cable.
④ Controller interface: by connecting the controller, play control, volume adjustment and audio source selection can be performed.
⑤ Power lamp
⑥ Complex line interface: including 1 group of 3.5mm socket audio input interface, 3 groups of RCA audio output interface, fiber output interface, coax output interface, steering wheel controller interface, and Alpine system matching interface (for connection with DSP product).
⑦ High level input interface: connected to the power output of onboard CD/DVD player.
⑧ Input selection switch: when the switch is turned to "ACC," the device will be started by ACC; when turned to "HOST," the device will be started by the high level input signal FL-/FL+.
⑨ Power output interface: connect the vehicle battery.
⑩ ⑪ ⑫ ⑬ Power output interface: connect the external amplifier.
⑭ Controller
⑮ Complex line (for connection of the complex line, refer to "Instructions on the Complex Line")
⑯ On-vehicle CD/DVD player
⑰ Vehicle battery

Instructions on the Complex Line
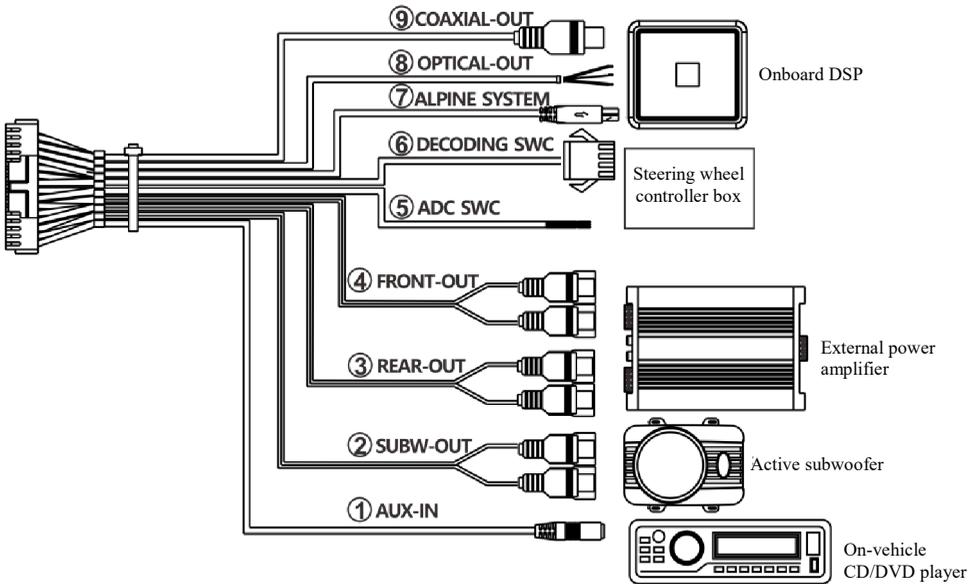
① AUX-IN: low level input, can be connected to onboard CD/DVD player.
② SUBW-OUT: subwoofer output, can be connected to an active subwoofer.
③ REAR-OUT: rear sound field RCA output, can be connected to an external power amplifier.
④ FRONT-OUT: front sound field RCA output, can be connected to an external power amplifier.
⑤ ADC SWC: ADC steering wheel controller interface, supports resistive control of steering wheel.
⑥ DECODING SWC: decoding steering wheel controller interface (not supported for now, will be updated in the near future).
⑦ ALPINE SYSTEM: can be connected to Alpine on-board DSP and only supports products with matching controller interface; for example, PXE-R600, PXE-0850X, or PXE-X09.
⑧ ⑨ OPTICAL-OUT/COAXIAL-OUT: fiber/coax interface, can be connected to onboard DSP; for example, PXE-0850X or PXE-X09 etc.

In order to prevent external noise from entering the audio system.
• The installation location of this device and arrangement of wires should be at least 10 cm from the vehicle wires.
• Keep the power cord of the battery far from other wires as much as possible.
• Connect the grounding wire firmly to the bare metal contact on the vehicle chassis (if necessary, remove as paint, dirt or oil).
• If you need to add an optional noise suppresser, install it as far from the host machine as possible. Your Alpine authorized dealer offers a variety of noise suppressors. For details, please contact them.
• Your Alpine authorized dealer is proficient in noise prevention methods. For details, please contact your dealer.

Regulatory requirements of radio law on Bluetooth

China	1. Technical indicators of this product:
	• Use frequency: 2.4-2.4835 GHz
	• Equivalent isotropically radiated power (EIRP):
	Antenna gain <10dBi: ≤100mW or ≤20dBm
	• Maximum power spectral density:
	Antenna gain <10dBi: ≤20dBm/MHz (EIRP)
	• Carrier frequency tolerance: 20 ppm
	• Out of band emission power (out of the 2.4-2.4835 GHz frequency band)
	≤-80dBm/Hz (EIRP)
	• Spurious emission (radiation) power (out of corresponding carrier ± 2.5 times channel bandwidth):
	≤-36dBm/100kHz (30-1000MHz)
	≤-33dBm/100kHz (2.4-2.4835GHz)
	≤-40dBm/1MHz (3.4-3.53GHz)
	≤-40dBm/1MHz (5.725-5.85GHz)
	≤-30dBm/1MHz (other 1-12.75 GHz)
	2. No change of emission frequency or increase of emission power (including the addition of RF power amplifier) without permission is allowed, no use of external antenna or switch to another emission antenna without permission is allowed;
	3. No harmful interference to various lawful radio communication services shall be produced during the use; once interference is found, the use shall be stopped immediately and shall not be resumed before measures are taken and the interference is eliminated;
	4. For the use of micro power radio devices, the interference of various radio services or the radiated interference of devices for industrial, scientific, and medical use must be tolerated.
	5. Use near an aircraft or airport is forbidden.