Android Auto

What Is Android Auto

Android Auto is designed to make it easier to use apps from your phone while you're on the road. Navigate with Google Maps, listen to playlists or podcasts from your favorite apps, and more.

Activate Android Auto

Download the Android Auto App from the Google Play store before continuing.
Just plug in your smartphone to the unit's USB connector, then follow the prompt to pair your smartphone with the unit.

• *The connected smartphone with Android Auto will disconnect other phone's Bluetooth connection and pair to the unit.*

1 **Press the All Menus ⊞ button → touch [Android Auto]. Or in the Home screen, touch [All Menus] → [Android Auto].**

2 **The Android Auto screen is displayed.**

• *When a used smartphone is reconnected, touch the pop-up message-"Android Auto connected" within 5 seconds to access to Android Auto screen, or you can ignore prompt by touching [✕] on the top right.*
• *You can make a call, use voice recognition function and Android Auto's compatible navigation app, etc,.*
• *Only Google approved apps with necessary driver-safety measures in place can be used.*

Apple CarPlay

Apple CarPlay is a smarter, safer way to use your iPhone in the car. Apple CarPlay takes the things you want to do with your iPhone while driving and puts them right on the unit. You can get directions, make calls, send and receive messages, and listen to music, all in a way that allows you to stay focused on the road. Just plug in your iPhone to the unit and go.

• *Before using this function, turn Apple CarPlay On and plug in your iPhone using Lightning to USB Cable (Supplied with iPhone) to the unit.*
• *Some functions may not be available while driving.*
• *About iPhone models usable with this unit, see "iPod/iPhone" (page 84). Only an iPhone 5 or later compatible with Apple CarPlay function.*

Access to Apple CarPlay

1 **Press the All Menus ⊞ button → touch [Apple CarPlay]. Or in the Home screen, touch [All Menus] → [Apple CarPlay].**

2 **The Apple CarPlay mode is activated.**

• *Touch the desired App icon on the unit, or use Siri function by pressing the 🎤 VOICE button.*
• *When a used iPhone 5 or later is reconnected, touch the pop-up message-"Apple CarPlay connected." within 5 seconds to access to Apple CarPlay screen, or you can ignore prompt by touching [✕] on the top right.*
• *The App must be Apple CarPlay compatible in order to appear in the Home screen.*

HDMI

Devices supporting HDMI can connect and play back through this unit. When making HDMI connections, you need to set HDMI on the unit suitable for the connected device.

- The HDMI/MHL connecting cable differs depending on the connected device corresponding to HDMI. Prepare optional HDMI/MHL connecting cable sets suitable for your device.
- The electronic device must possess an HDMI output interface.
- Not all devices with an HDMI output interface can be recognised by this unit.
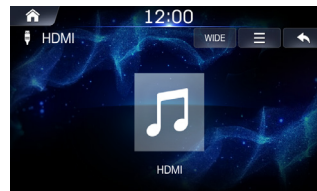- Use only the Alpine Special HDMI connection cable.

⚠ WARNING

- It is dangerous (and illegal in many countries) for the driver to watch video while driving the vehicle. The driver may be distracted from looking ahead and an accident could occur.
- Install the unit correctly so that the driver cannot watch video unless the vehicle is stopped, and the parking brake is applied.
- If the unit is not installed correctly, the driver will be able to watch video while driving the vehicle and may be distracted from looking ahead and cause an accident. The driver or other people could be severely injured.

- HDMI Video is not available while driving. (Because of traffic regulations, videos are only available when your vehicle is parked.)
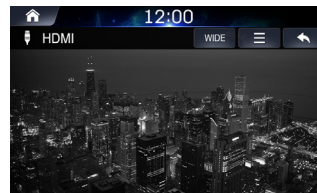
If you are driving, please pull over and park before using this function.

HDMI Main Screen

HDMI Audio

12:00

HDMI WIDE

HDMI

HDMI Video

12:00

HDMI WIDE

Playing HDMI Mode

1 Press the All Menus ▦ button → touch [HDMI]. Or in the Home screen, touch [All Menus] → [HDMI].

2 Control directly within your HDMI device.

Viewing in Full Screen

Touch the screen in a non-menu area to change to full screen. If you want to display the menu, touch the screen.

- If there are no operations for 10 seconds, the menu will automatically disappear.
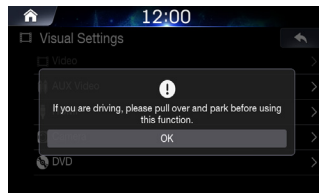
Changing Screen Ratio

1 Touch [Wide].
Each time the button is touched, the mode is changed.

2 Select the desired mode.
- Wide: displays in 16:9 wide screen.
- Normal: displays in 4:3 screen ratio.
- Cinema: displays in 21:9 screen ratio

Visual Settings

Touch ☰ → **[Visual Settings]**
For details, refer to "Visual Settings" on page 73.

- Operating the Visual Settings is not available while driving. (Because of traffic regulations, videos are only available when your vehicle is parked.)

Sound Settings

Touch ☰ → **[Sound Settings]**
For details, refer to "Sound Settings" on page 68.

AUX (Auxiliary Device)

Devices supporting AUX can connect and play back through this unit. When making AUX connections, you need to set AUX on the unit suitable for the connected device.

- Set AUX to "On."
- Depending on the connected unit, the operation may differ.
- You can operate AUX, AUX DVD, GAME, Ext. DVD, DVD Changer, DVB-T, TV and -USB Player.

⚠ WARNING

- It is dangerous (and illegal in many states) for the driver to watch TV/video while driving the vehicle. The driver may be distracted from looking ahead and an accident could occur.
- Install the unit correctly so that the driver cannot watch TV/video unless the vehicle is stopped and the emergency brake is applied.
- If the unit is not installed correctly, the driver will be able to TV/watch video while driving the vehicle and may be distracted from looking ahead and cause an accident. The driver or other people could be severely injured.

- AUX TV/Video is not available while driving. (Because of traffic regulations, videos are only available when your vehicle is parked.)
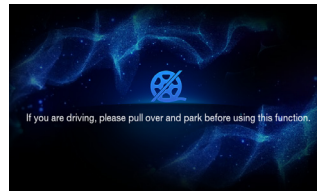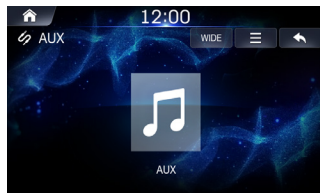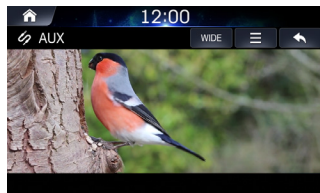
AUX Main Screen

AUX Audio

AUX Video

Playing AUX Mode

1 **Press the All Menus ⊞ button → touch [AUX]. Or in the Home screen, touch [All Menus] → [AUX].**

2 **Control directly within your external device.**

Viewing in Full Screen

Touch the screen in a non-menu area to change to full screen.
If you want to display the menu, touch the screen.

• *If there are no operations for 10 seconds, the menu will automatically disappear.*

Changing Screen Ratio

1 **Touch [Wide].**
Each time the button is touched, the mode is changed.

2 **Select the desired mode.**
• *Wide: displays in 16:9 wide screen.*
• *Normal: displays in 4:3 screen ratio.*
• *Cinema: displays in 21:9 screen ratio*

Visual Settings

Touch ☰ → [Visual Settings]
For details, refer to "Visual Settings" on page 73.

• *Operating the Visual Settings is not available while driving. (Because of traffic regulations, videos are only available when your vehicle is parked.)*

Sound Settings

Touch ☰ → [Sound Settings]
For details, refer to "Sound Settings" on page 68.

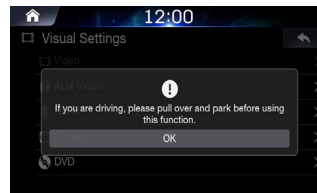# Bluetooth Audio

Music saved in the mobile phone, portable player, etc. can be played in the car through Bluetooth audio streaming.

- Bluetooth audio can be played only when a Bluetooth phone or Bluetooth audio device has been connected. To play Bluetooth audio, connect the Bluetooth phone to the car system. For more information on connecting Bluetooth, please refer to the user's manual [Pairing and connecting the unit and a Bluetooth phone] on page 64.
- The feature may operate differently depending on the Bluetooth device.

Bluetooth Audio Main Screen

① **Menu**
② **Displays the Previous Screen**
③ **Bluetooth Icon**
④ **Information Display**
⑤ **Play Time and Play Bar**
⑥ **Previous File**
⑦ **Play / Pause**
⑧ **Repeat**
⑨ **Shuffle**
⑩ **Next File**

Playing Bluetooth Audio

1 Press the All Menus ▦ button → touch [Bluetooth Audio]. Or in the Home screen, touch [All Menus] → [Bluetooth Audio].

2 Touch |◀◀ or ▶▶| and select the desired file.
If play time is over 3 seconds, pressing |◀◀ will play the current file from the beginning.

3 Touch ▶|| to play Bluetooth Audio.
While playing, touch ▶|| to pause Bluetooth Audio.

- The title/artist info may not be supported in some devices. When it is not supported, only the symbol will be displayed.
- The play/pause feature may operate differently depending on the device.

Fast-Forwarding or Rewinding a File

Using |◀◀ or ▶▶| .

1 **While playing, touch and hold |◀◀ or ▶▶| .**
Touch and hold for more than 1 second to rewind or fast-forward at 4x speed. Keep touching to switch the speed to 20x.

2 **Release |◀◀ or ▶▶| to play the track at normal speed.**

Repeat

Touch 🔁 to toggle between the modes.

- *One File* 🔂 *: repeats play of currently playing file.*
- *On* 🔁 *: repeats all of the files in the Bluetooth Audio.*
- *Off* 🔁 *: turns the Repeat feature off.*

Shuffle

Touch 🔀 to toggle between the modes.

- *On* 🔀 *: plays files in the current category in random order.*
- *Off* 🔀 *: turns the shuffle feature off.*

Sound Settings

Touch ☰ → **[Sound Settings]**
For details, refer to "Sound Settings" on page 68.

Bluetooth Operation

Setup Before Using

■ About Bluetooth

Bluetooth is a wireless technology allowing communication between a mobile device or personal computer over short distances. This enables a handsfree call or data transmission between Bluetooth compatible devices. Bluetooth transmission is available in the unlicensed 2.4 GHz spectrum if the distance between devices is within 10 metres. For details, refer to the Bluetooth website (http://www.bluetooth.com/).

- 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 surroundings, Bluetooth wireless connection may be unstable.

- When you place a call, or perform setup operations, be sure to stop your car in a safe place.

- Depending on the connected Bluetooth compatible device(s), the function may differ. Also refer to the Owner's Manual of the connected device(s).

■ About Handsfree Phone

Handsfree calls are possible when using a HFP (Hands-Free Profile) compatible mobile phone with this unit.

- Avoid performing a handsfree call in heavy traffic or on narrow or winding streets.

- Close the windows while calling to reduce background noise.

- If both calling parties are using handsfree devices, or the call is made in a noisy location, difficulty hearing the other person's voice is normal.

- Depending on telephone line conditions or certain mobile devices used, voices may sound unnatural.

- When using a microphone, speak as directly as you can into the microphone to obtain the best sound quality.

- Certain mobile phone features are dependent on the capabilities and settings of your service provider's network. Additionally, certain features may not be activated by your service provider, and/or the provider's network settings may limit the feature's functionality.

- Always contact your service provider about feature availability and functionality.

- All features, functionality, and other product specifications, as well as the information contained in the Owner's Manual are based upon the latest available information and are believed to be accurate at the time of printing.

- Alpine reserves the right to change or modify any information or specifications without notice or obligation.

- Notice that when you connect an iPhone 5 or later/Android smartphone which installed Android Auto App, the operation screen may differ from this section.

Phone

Pairing and Connecting a Phone

When No Phones Have Been Paired

1 **Press the All Menus ▦ button → touch [Phone]. Or in the Home screen, touch [All Menus] → [Phone].**
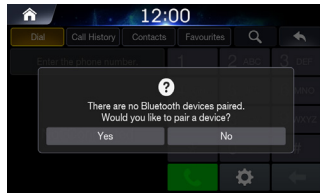
2 **Touch [Yes].**
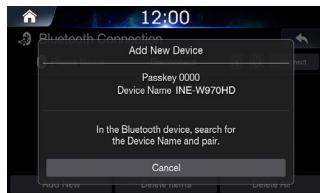
3 **Pair from the Bluetooth Device**
From the Bluetooth device, search for the car name and pair the device. When searching from the Bluetooth device, the car name is 'INE-W970HD' and the default passkey is '0000'.

When a Phone Is Already Paired

1 **Press the All Menus ☰ button → touch [Phone]. Or in the Home screen, touch [All Menus] → [Phone].**
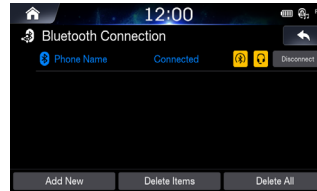
2 **Select the device from the list and touch [Connect].**

• When a Bluetooth device is connected, a new device cannot be paired. If you want to pair a new phone, first disconnect the connected Bluetooth device.

When a Phone Is Connected

1 **Press the All Menus ☰ button → touch [Phone]. Or in the Home screen, touch [All Menus] → [Phone].**

The following screen will be displayed.
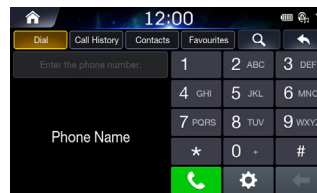
• Once Bluetooth connection is successful, the name of the connected mobile phone will be displayed on the phone screen and Bluetooth handsfree functions will be ready to be operated.

• Some functions may not be supported due to limited Bluetooth compatibility between the car system and mobile phone.

Disconnecting Bluetooth Devices

1 In the Phone screen, touch [Settings] → [Bluetooth Connection].
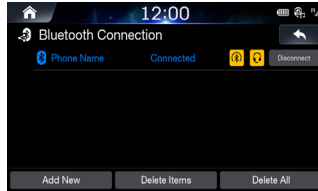
2 Select the currently connected device and touch [Disconnect].

Deleting Bluetooth Devices

1 In the Phone screen, touch [Settings] → [Bluetooth Connection].

2 Touch [Delete Items] and select the device you wish to delete.
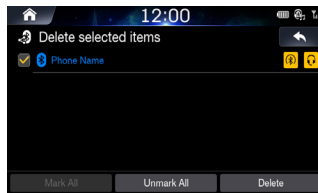
3 Touch [Delete].
To select all devices, press [Mark All].
To deselect all selected devices, press [Unmark All].

- A connected Bluetooth device cannot be deleted. First disconnect the connected Bluetooth device.
- If you want to delete all paired devices, touch [Delete all].
- Once a device is deleted, the call history and contacts that were saved to the head unit are also deleted.

Phone Screen

Bluetooth Phone Main Screen
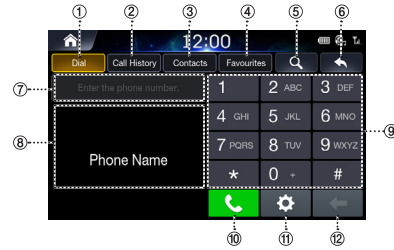
① **Dial**
This is the main screen in which Bluetooth Phone operates.

② **Call History**
Display the Call History screen.

③ **Contacts**
Display the Contacts screen.

④ **Favorites**
Display the Contacts screen.You can add frequently used numbers to Favorites to quickly find and call numbers.

⑤ **Search**
Displays the Contacts Search screen. You can search the contacts by name or phone number.

⑥ **Displays the Previous Screen**

⑦ **Number Field**
Shows entered numbers

⑧ **Search Results**
Displays the contact and number search results.

⑨ **Dial Pad**
Used to enter numbers.The entered numbers are shown in the number field.

⑩ **Call**
If a number has been entered, calls the number.

⑪ **Settings**
Displays the Bluetooth Settings Screen.

⑫ **Delete**
Deletes entered numbers.

Making a Call

Dialling by Dialling a Number

1 **Enter number on the Dial Pad**

2 **Touch [Call].**
The phone call is started.
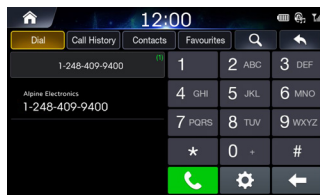
- If you press the wrong number, press [Delete] to delete one digit of the entered number. Press and hold the dial pad [0+] to enter a "+".

■ **Making a Call from Speed Dial**
1. **Enter the 1 or 2 digit speed dial number with the Dial Pad**
2. **Touch and hold the last number.**
   The phone call is started.

■ **Calling through Redial**
1. **Touch and hold [Call].**
   The phone call is started.

- Redialling is not possible when there is no dialled calls list.

Making a Call from Contacts

1 **Touch [Call History]**

2 **Select the desired option.**
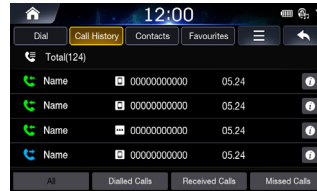
- All: entire calls list
- Dialled Calls: dialled calls list
- Received Calls: received calls list
- Missed Calls: missed calls list

3 **Select the contact you wish to call.**
The phone call is started.

Making a call from contacts

1 **Touch [Contacts]**

2 **Touch** ▤ → **Select the desired search option.**
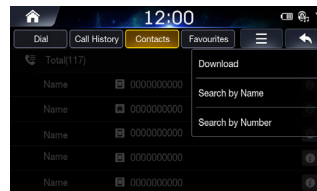
3 **Enter the name or number.**

4 **Select the contact you wish to call.**
The phone call is started.

Making a Call from Favorites

1 **Touch [Favorites]**

2 **Select the contact you wish to call.**
The phone call is started.
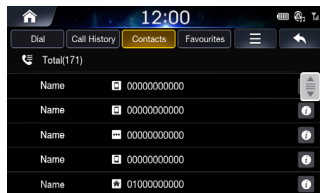
Answering a Call

1 **When there is an incoming call you wish to accept, touch [Accept].**

2 **The incoming call is connected.**
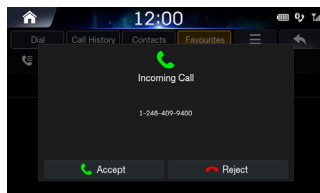
- During a call, the audio for the current mode on the unit is muted. After calling, playback will resume.
- When the caller's number is transmitted to the system, if the caller's name is stored in the phone book, the name is displayed. If the name is not stored, the number is displayed.
- Touch ▄ (Reject) to reject an incoming call.

Operating Menus During a Call
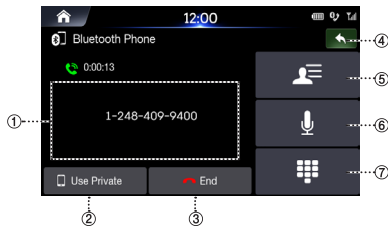
① **Info Display Window**

② **Use Private**
During a handsfree call, this function is used to switch the call to the mobile phone.

③ **End**

④ **Displays the Previous Screen**

⑤ **Contacts**

⑥ **Mic Volume On/Off**

⑦ **Dial Pad**

Ending a Call

1 Touch [End].

Switching a Call to Private/Handsfree

1 During a handsfree call, press [Use Private] to switch the call to Bluetooth phone.

2 Once the call is switched to the cell phone, a message is displayed on the screen.
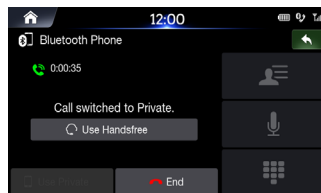
3 To switch the call back to the handsfree, press [Use Handsfree].

Switching to Call Waiting

If another person calls while you are already on a call, the current call can be placed on hold or ended to answer the new call.

1 If there is a new call, the following screen will be displayed.
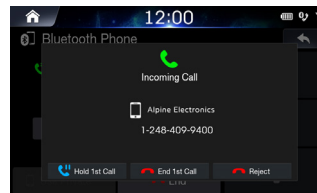
- *Hold 1st Call: holds current call and answers new call.*
- *End 1st Call: ends current call and answers new call.*
- *Reject: rejects new call and maintains current call.*

2 If there is a call waiting, touch [Switch] to switch to the waiting call.
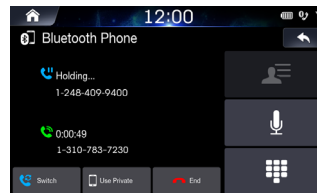
- *To finish a call, touch* ☎ *(End).*

Turning Mic On/Off

This feature is used to mute the outgoing volume to the other party.

1 **During a call, touch 🎙️ .**

2 **To Turn the mic back on, touch 🎙️ again.**
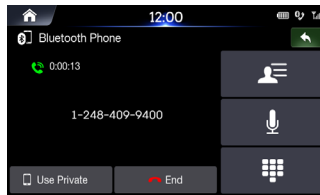
Adjusting Call Volume

This menu is used to adjust the mic volume during calls.

Press the volume (+/-) button to adjust the mic volume.

DTMF (Touch-Tone) Function

This menu is used to display keypad during calls.

1 **Touch 🔢 .**
The number input screen (Keypad) displays.

2 **Enter number.**

Contacts

Downloading Contacts

Up to 5,000 mobile phone contacts can be updated.

1 **Touch ≡ → [Download].**
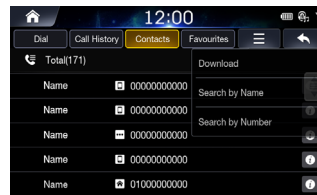
2 **The contacts are deleted and the contacts of the connected phone is updated.**

Searching Contacts

1 **Touch ≡ → [Search by Name] or [Search by Number].**
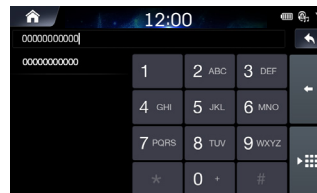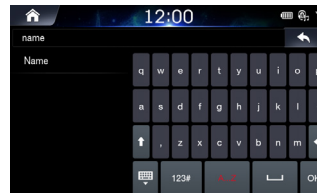
2 **Enter the name or number.**

3 **Select the contact you wish to call.**
The phone call is started.

• For details of how to input characters using the keypad, see "How to "Inputting Text (Keypad)" on page 15.

• You can also search contacts by touching 🔍 in the Bluetooth Phone main screen.

61-EN

Information

1 Touch ⓘ .
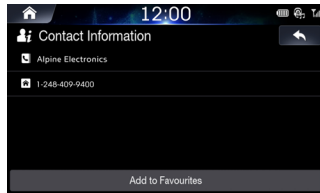
2 Touch [Add to Favorites] to add contact to Favorites.

Call History
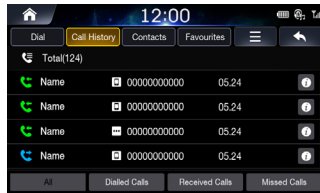

- All: entire calls list
- Dialled Calls: dialled calls list
- Received Calls: received calls list
- Missed Calls: missed calls list

Information

1 Touch ⓘ .
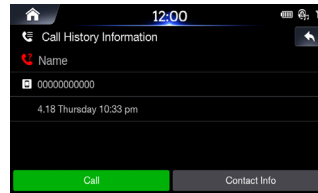
2 Touch [Call] to make a call
Touch [Contact info] → [Add to Favorites] to add contact to Favorites.

Favorites

You can add frequently used numbers to Favorites to quickly find and call numbers.

Saving to Favorites

1 When no Favorites have been added, the following screen will be displayed.
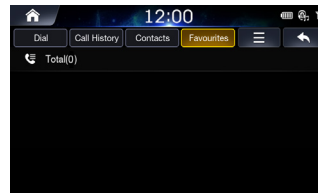
2 Touch [Add New].

3 Select the contact you wish to add from the contacts.

- To add a contact to a saved Favorites list, touch ☰ → [Add New].

Deleting Favorites

1 Touch ☰ → [Delete Items]
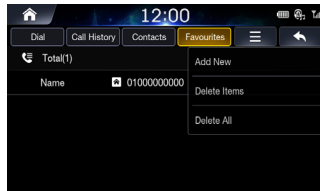
2 Select the contacts and touch [Delete].
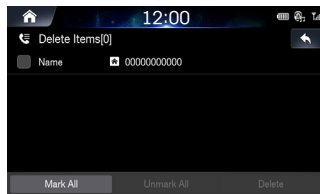
- If you want to delete all, touch ☰ → [Delete all].

Bluetooth Settings

1 Touch [Settings].
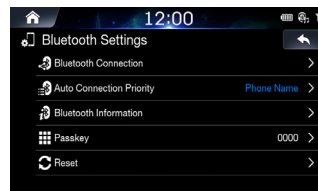
For details, refer to "Bluetooth Settings" on page 64.

Setup

Starting Mode

1 Press the All Menus ⊞ button → touch [Setup]. Or in the Home screen, touch → [Setup].

The Setup main screen will be displayed. Swipe to the left to see the second page.

2 Touch the icon of the desired setting.

Bluetooth Settings

This menu allows you to set Bluetooth settings.

1 In the Setup screen, touch [Bluetooth].
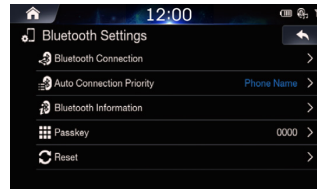
Bluetooth Connection

This menu allows you to manage the Bluetooth device list, such as pairing, connecting or deleting Bluetooth devices.

1 In the Bluetooth Settings screen, touch [Bluetooth Connection].
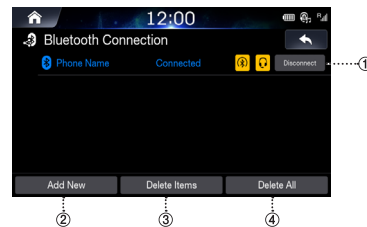
① **Connect/Disconnect**
connects/disconnects a Bluetooth device.

② **Add new**
pairs a new Bluetooth device.

③ **Delete items**
deletes a paired Bluetooth device.

④ **Delete all**
deletes all paired Bluetooth devices.

■ Pairing and Connecting a Phone - When no Phones Have Been Paired

1. Touch [Add New].
   Or in the Home screen, touch [All Menus] → [Phone].
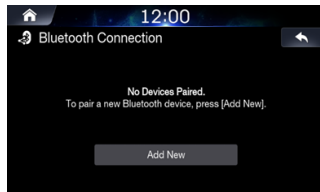
2. Pair from the Bluetooth Device.
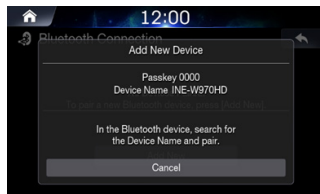
From the Bluetooth device, search for the AVN unit name and pair the device. When searching from the Bluetooth device, the AVN unit name is 'INE-W970HD' and the default passkey is '0000'.

- *Some Bluetooth devices may require you to enter the passkey while others may not.*

3. Once Bluetooth connection is successful, the name of the connected Bluetooth device will be displayed on the screen.

■ When a Phone is Already Paired

Select the device from the list and touch [Connect].
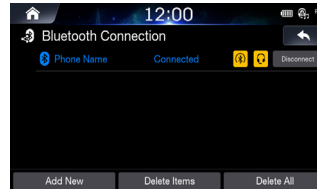
- *While a phone is paired and connected, the user can press [Add New] and follow the prompt to confirm system action to disconnect the current phone and pair a new one.*

- *You can register up to 5 Bluetooth compatible mobile phones.*

- *If all 5 devices have been registered, you cannot register a 6th device. To register another device, you need to delete one of the other 5 devices first.*

■ **Disconnecting Bluetooth Devices**

Select the currently connected device and touch [Disconnect].
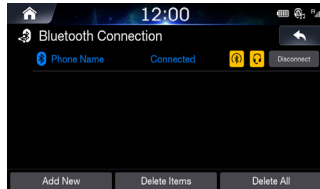
■ **Deleting Bluetooth Devices**

1. Touch [Delete Item] and select the device you wish to delete.
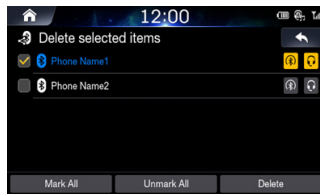
2. Touch [Delete].
    To select all devices, press [Mark All].
    To deselect all selected devices, press [Unmark All].

• *A connected Bluetooth device can be deleted by pressing Yes in the popup window alerting you that the device will first be disconnected.*

• *If you want to delete all paired devices, touch [Delete all].*

• *Once a device is deleted, the call history and contacts that were saved to the head unit are also deleted.*

Setting Auto-Connection Priority

The Bluetooth device that is selected to have priority will automatically be connected when the car ignition is turned on.

1 In the Bluetooth Settings screen, touch [Auto connection priority].
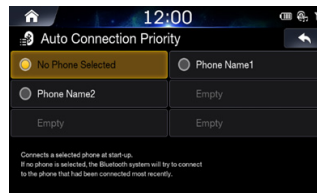
2 Select the Bluetooth device you want the system to connect automatically.
    If you touch [No Phone Selected] button, the most recently connected Bluetooth® phone will connect automatically.

Viewing Bluetooth System Info

This feature is used to view the Bluetooth vehicle name and system information.

1 **In the Bluetooth Settings screen, touch [Bluetooth Information].**

Setting the Passkey

This feature allows you to change the passkey used for Bluetooth device authentication.

1 **In the Bluetooth Settings screen, touch [Passkey].**
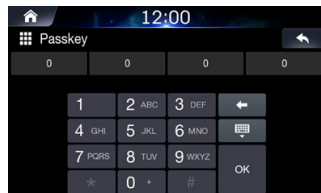
2 **Enter the passkey and touch [OK]**

· *The default passkey is 0000.*

Resetting Bluetooth Settings

This feature will restore the system's Bluetooth connection settings to the factory default. Any paired/connected devices will be removed.

1 **In the Bluetooth Settings screen, touch [Reset].**

2 **Touch [Reset] → [Yes].**

Sound Settings

This menu is used to adjust the sound effects for the whole system.

1 In the Setup screen, touch [Sounds].

Setting Tone/Fader/Balance

1 In the Sounds Settings screen, touch [Tone/Fader/Balance].

2 Use the ▲, ▼, ◄, ►, +, -, and ⊙ buttons to adjust settings.

Touch ⊞ to restore sound to the Center position.
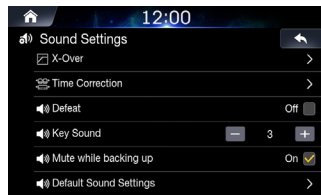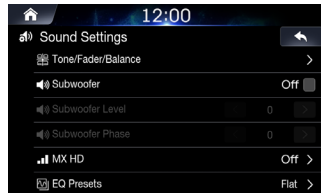
Setting Subwoofer

1 Check the [Off] box to turn subwoofer feature on.
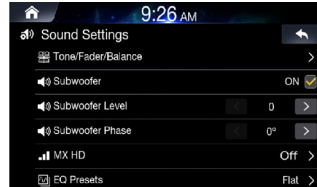
2 Adjust the subwoofer level and phase using [<, >].

- The Subwoofer Lever and Phase features are unavailable when the Subwoofer feature is turned off.
- The subwoofer level can be set from 0 to 15.
- The subwoofer output phase is toggled Subwoofer Normal (0°) or Subwoofer Reverse (180°).

Setting MX HD

Media Xpander (MX HD) makes vocals or instruments sound distinct regardless of the music source. The Radio FM/SiriusXM, USB Flash drive and iPod/iPhone, will be able to reproduce the music clearly even in cars with a lot of road noise.

1 In the Sounds Settings screen, touch [MX HD].

2 Set the desired option.

Media: Off/Level1/Level2/Level3: The medium to high frequencies become more clear, and produces well balanced sound in all the bands.

When AUX is connected, the options will be [Off, Compressed Media / Movie / Music].
AUX: Off / Compressed Media / Movie / Music : Choose the MX HD mode (Compressed Media, Movie, or Music) that corresponds to the media connected.

- *When the Defeat setting is "On," you cannot perform the set up.*
- *The MX HD setting can be performed only when a source is currently selected.*
- *The effectiveness increases as the MX HD setting value increases Level1 Level2 Level3.*
- *Movie: The dialogue portion of the video is reproduced more clearly*
- *Music: This disc contains a large quantity of data such as music clip. MX uses this data to reproduce the sound accurately.*

Setting EQ Presets

10 typical equalizer settings are preset at the factory for a variety of musical source material..

1 In the Setup screen, touch [EQ Presets].

- *Only one type can be set to ON.*
- *The Equalizer Presets setting can be configured when Defeat is "Off."*

Setting the Crossover (X-Over)

■ About the Crossover

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.

	Cut-off frequency (1/3 octave steps)		Slope		Level
	HPF	LPF	HPF	LPF	
Subwoofer (LPF)	----	20 Hz - 200 Hz	----	0, 6, 12, 18, 24 dB/oct.	0 to −12 dB
Rear speaker (HPF)	20 Hz - 200 Hz	----	0, 6, 12, 18, 24 dB/oct.	----	0 to −12 dB
Front speaker (HPF)	20 Hz - 200 Hz	----	0, 6, 12, 18, 24 dB/oct.	----	0 to −12 dB
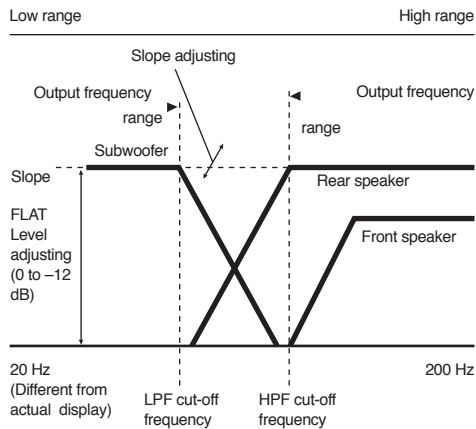
- HPF (high pass filter): Cuts the lower frequencies and allows the higher frequencies to pass.
- LPF (low pass filter): Cuts the higher frequencies and allows the lower frequencies to pass.
- Slope: The level change (in dB) for a frequency change of one octave.
- The higher the slope value, the steeper the slope becomes.
- Adjust the slope to FLAT to bypass the HP or LP filters.
- Do not use a tweeter without the HPF set on, with a high cut-off frequency, otherwise damage may occur to the speaker due to the low frequency content.

- 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.

1. In the Setup screen, touch [X-Over].

2. Touch [Channel[to select the channel.
   Each time you touch, the channel switches.

- The channel being adjusted is displayed in red.
  Front HPF → Rear HPF → Subw. LPF → Front HPF

3. Adjust the crossover to your preference.

Selecting the Cut-Off Frequency

Touch ◀ or ▶ of "Frequency," and then select the cut-off frequency. (20 / 25 / 31.5 / 40 / 50 / 63 / 80 (Initial setting) / 100 / 125 / 160 / 200)

Adjusting the Slope

Touch ◀ or ▶ of "Slope," and then adjust the HPF or LPF slope. (0 (Initial setting) / 6 / 12 / 18 / 24 dB/oct.)

Adjusting the Level

Touch [+] or [-] of "Level," and then adjust the HPF or LPF level. (-12 to 0 dB (Initial setting: 0))

4. Repeat steps 1 to 2 to make adjustment to the other channels.

5. To store the adjusted setting value, touch and hold [Preset 1], [Preset 2], or [Preset 3] for at least 2 seconds.

- Touch [Flat] to initialise all values.
- If the Subwoofer setting is "Off," the Subwoofer setting cannot be edited.
- While adjusting the X-OVER you should consider the frequency response of the connected speakers.

Calling the X-OVER adjusted value

Calling the pre-set X-OVER adjusted value.

Touch [Preset 1], [Preset 2], or [Preset 3] on the X-OVER screen.
The setting stored in the Preset will be recalled.

Setting the Time Correction

■ 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 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.

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.
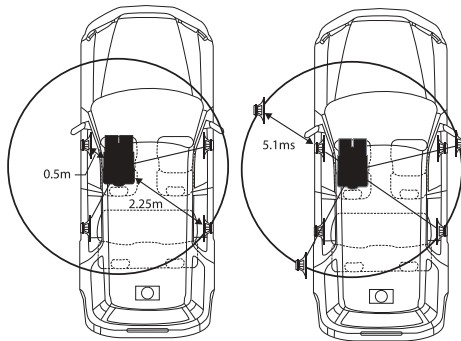
The sound is not balanced because the distance between the listening position and the various speakers is different.
The difference in distance between the front left speaker and the rear right speaker is 1.75 m (68-7/8").
Here we calculate the time correction value for the front left speaker in the 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 meters) 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	5.0	170.0	67.0
0.1	3.4	1.3	5.1	173.4	68.3
0.2	6.8	2.7	5.2	176.8	69.7
0.3	10.2	4.0	5.3	180.2	71.0
0.4	13.6	5.4	5.4	183.6	72.4
0.5	17.0	6.7	5.5	187.0	73.7
0.6	20.4	8.0	5.6	190.4	75.0
0.7	23.8	9.4	5.7	193.8	76.4
0.8	27.2	10.7	5.8	197.2	77.7
0.9	30.6	12.1	5.9	200.6	79.1
1.0	34.0	13.4	6.0	204.0	80.4
1.1	37.4	14.7	6.1	207.4	81.7
1.2	40.8	16.1	6.2	210.8	83.1
1.3	44.2	17.4	6.3	214.2	84.4
1.4	47.6	18.8	6.4	217.6	85.8
1.5	51.0	20.1	6.5	221.0	87.1
1.6	54.4	21.4	6.6	224.4	88.4
1.7	57.8	22.8	6.7	227.8	89.8
1.8	61.2	24.1	6.8	231.2	91.1
1.9	64.6	25.5	6.9	234.6	92.5
2.0	68.0	26.8	7.0	238.0	93.8
2.1	71.4	28.1	7.1	241.4	95.1
2.2	74.8	29.5	7.2	244.8	96.5
2.3	78.2	30.8	7.3	248.2	97.8
2.4	81.6	32.2	7.4	251.6	99.2
2.5	85.0	33.5	7.5	255.0	100.5
2.6	88.4	34.8	7.6	258.4	101.8
2.7	91.8	36.2	7.7	261.8	103.2
2.8	95.2	37.5	7.8	265.2	104.5
2.9	98.6	38.9	7.9	268.6	105.9
3.0	102.0	40.2	8.0	272.0	107.2
3.1	105.4	41.5	8.1	275.4	108.5
3.2	108.8	42.9	8.2	278.8	109.9
3.3	112.2	44.2	8.3	282.2	111.2
3.4	115.6	45.6	8.4	285.6	112.6
3.5	119.0	45.9	8.5	289.0	113.9
3.6	122.4	48.2	8.6	292.4	115.2
3.7	125.8	49.6	8.7	295.8	116.6
3.8	129.2	50.9	8.8	299.2	117.9
3.9	132.6	52.3	8.9	302.6	119.3
4.0	136.0	53.6	9.0	306.0	120.6
4.1	139.4	54.9	9.1	309.4	121.9
4.2	142.8	56.3	9.2	312.8	123.3
4.3	146.2	57.6	9.3	316.2	124.6
4.4	149.6	59.0	9.4	319.6	126.0
4.5	153.0	60.3	9.5	323.0	127.3
4.6	156.4	61.6	9.6	326.4	128.6
4.7	159.8	63.0	9.7	329.8	130.0
4.8	163.2	64.3	9.8	333.2	131.3
4.9	166.6	65.7	9.9	336.6	132.7

1. In the Setup screen, touch [Time Correction].

2. Touch the Correction Mode button and select the mode.
Each time the button is pressed, mode is changed from ms, inch and cm.

3. 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.

4. To store the adjusted setting value, touch and hold [Preset 1], [Preset 2], or [Preset 3] 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.*

Calling the Time Correction Value
Calling the pre-set time correction value.

Touch [Preset 1], [Preset 2], or [Preset 3] on the time correction screen.
The setting stored in the Preset will be recalled.

Setting Defeat

When Defeat is "ON," MX HD and EQ Presets are turned off. The settings for these functions will be disabled.

Check the [Off] box to turn the feature on.
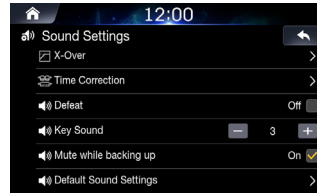
Uncheck the [On] box to turn the feature off.

Setting Key Sound

You can change the volume of the sound heard when a button is touched.

Adjust the sound level from 0 to 6.
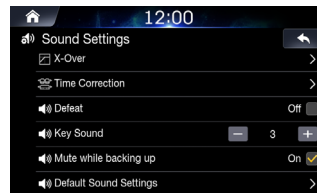
Setting Mute while backing up

1 **Select the desired option from Off and On.**
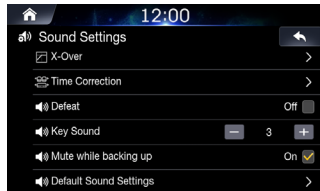
- Audio Mute while Reversing - feature used to control audio upon shifting the vehicle into Reverse.
- On - Mutes sound while play continues.
- Off - Audio continues to play, unmuted.

Default Sound Settings

This feature is used to restore all sound settings back to default state.

1 **In the Sound Settings screen, touch [Default Sound Settings].**
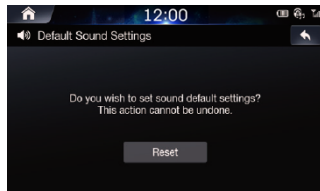
2 **Touch [Reset].**

Visual Settings

This feature is used to adjust the Brightness, Saturation, Contrast and Hue levels.

1 **In the Setup screen, touch [Visual].**
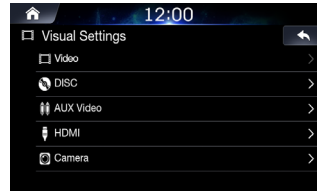
- "Video" can be selected while a video is playing.

Setting Brightness/Contrast/Saturation/Hue

1 **In the Visual Settings screen, touch the desired menu.**
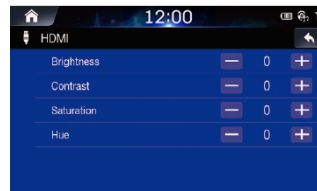
2 **Use [+] and [-] to adjust settings from -5 to +5.**

- In the Video visual settings, [Hue] is not supported.

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Screen Settings

This menu allows you to set the display settings for the whole system

In the Setup screen, touch [Screen].
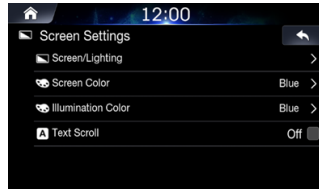
Setting Screen/Lighting

In the Screen Settings screen, touch [Screen/Lighting].
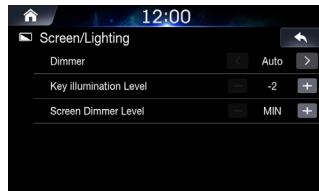
■ **Setting Dimmer**
Backlighting is provided by LED lights built into the liquid crystal panel. The Dimmer setting adjusts the brightness of the backlighting based on the car ambient lighting for easier viewing.

Set the desired value from Auto, On and Off.
Auto: Adjust the brightness of the background illumination of the monitor automatically to the brightness of the car interior.
On: Keep the background illumination of the monitor dark.
Off: Deactivate Auto Dimmer mode to keep the background illumination of the monitor bright.

• *The Key Illumination Level and Screen Dimmer Level feature are unavailable when the Dimmer value is set to "Off".*

■ **Setting Key Illumination Level**
You can adjust the brightness of the button lighting at night with the Key Illumination Level.

Adjust the value from -2 to +2.

This setting is only available when "Dimmer" is set to "On." or "Auto."

■ **Setting Screen Dimmer Level**
You can adjust the brightness of the backlight. This function could be used, for instance, to change the screen brightness while travelling at night.

Adjust the value from -15 to +15.
You can adjust the level between MIN (-15) and MAX (+15). When it reaches the minimum or maximum point, the display shows "MIN" or "MAX" respectively.

• *This setting is only available when "Dimmer" is set to "On" or "Auto."*

Setting Screen Color

You can choose the screen Color from 5 different Colors.

1 **In the Screen Settings screen, touch [Screen Color].**

2 **Select the desired Color.**

Setting Illumination Color

You can choose the Color of the Front Panel button from one of 7 Colors.

In the Screen Settings screen, touch [Illumination Color].
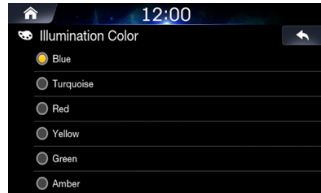
Setting Text Scroll

Scroll display is available if folder name, file name or tag information is entered.

Check the [Off] box to turn the feature on.
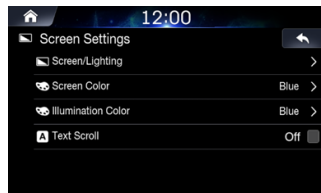
- Uncheck the [On] box to turn the feature off.

General Setup

You can set up items related to the language, etc.

In the Setup screen, touch [General].

Setting Screen Saver

This feature is used to display a screen saver when the monitor is off.

1 **In the General Settings screen, touch [Screen Saver].**
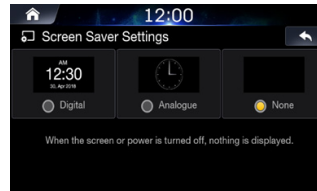
2 **Select the desired option.**

- Digital: the screen will display the digital clock.
- Analogue: the screen will display the analogue clock.
- None: the screen will remain off.

Setting Language

This menu allows you to set the language of the system.

1 In the General Settings screen, touch [Language].
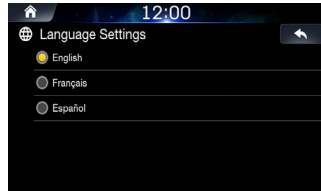
2 Select the desired language.
English / Français / Español

Setting Security Code

You can set the system to be unusable without entering a password. When you turn this setting to "On" and set a password, password input is required when the system is connected to a battery and turned on for the first time.

■ Setting the security Code

1. Check the [Off] box to turn the feature on and touch [OK].
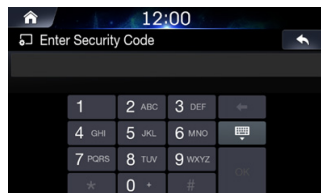
2. Enter a password and touch [OK].
· Enter a 6~10 digit number.
· Touch [←] to delete an entered number.

3. Enter the same pasword again and touch [OK].
The security code is set and the system returns to the General Settings screen, then the checkbox of the Security Code is set to "On".

· If you forget a registered password, you can not use this unit. In this case, service will be required.

■ Clearing the security Code

1. Uncheck the [On] box.
The password setting screen is displayed.

2. Enter the password you have set and touch [OK].
The password is cleared and the system returns to the General Settings screen then the checkbox of the Security Code is set to "Off".

Viewing System Info

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.

In the General Settings screen, touch [System Info].
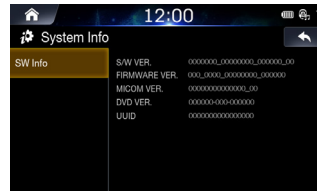
Setting Demo Mode

This unit has a Demonstration feature for the display.
To quit demo mode, set Demo mode to Off.

1 **Uncheck the [On] box to turn the feature off.**
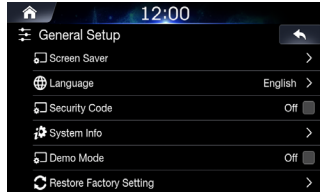
2 **Check the [Off] box to turn the feature on.**
To start Demo mode, refrain from operating the system for 30 seconds. Please wait.

• *If you perform an operation during the Demo mode, the demonstration is temporarily stopped.*

Initializing the System

You can initialise all data, to restore the factory settings. Remove the USB flash drive, etc. from the system before operation.

1 **In the General Settings screen,
touch [Factory Reset].**
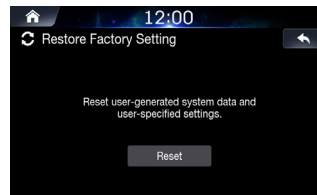
2 **Touch [Reset] → [Yes].**

• *Do not turn on/off the power, change the ignition key position or remove the screen panel until system restart is completed.*

Car Settings

In the Setup screen, touch [Car].
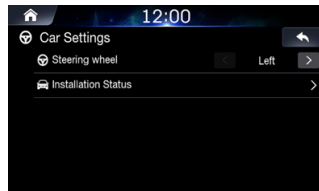
Setting Steering Wheel

Set this item when Apple CarPlay is used.
This setting influences Apple CarPlay mode.

Select the desired option from Left and Right.

Setting Installation Status

Installation Status enables you to check the connection status of Reverse Lead/Parking Brake Lead.

In the Car Settings screen, touch [Installation Status].
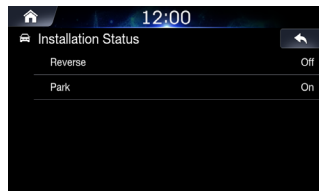
SiriusXM Settings

In the Setup screen, touch [SiriusXM].
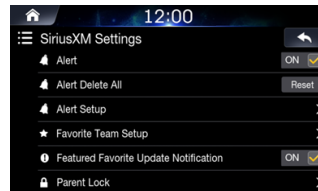
Setting All Alerts On/Off

This menu option allows you to temporarily disable all alerts.

1 **Uncheck the [On] box of Alert to disable the alerts.**
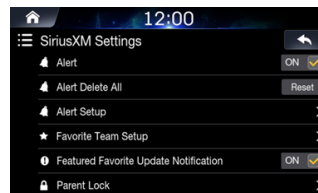
2 **Check the [Off] box to enable the alerts.**

Deleting All Saved Alerts

This operation will delete all alerts (artists, songs and teams) saved in memory.

1 Touch [Reset] of "Alert Delete All".
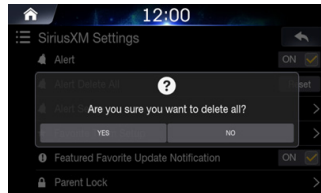
2 Touch [YES] to clear the information of all stored Artist, Song, and Game alert items.
Touch [NO] to cancel.

Setting Saved Alerts

This menu option allows you to disable/delete the saved alerts.

1 In the SiriusXM Settings screen, touch [Alert Setup].
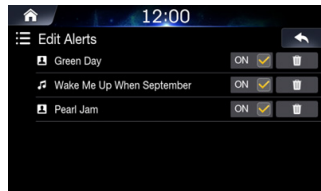
2 Uncheck the [On] box to disable the alerts. Check the [Off] box to enable the alerts.

3 Touch [Del] to delete the saved alerts.

Setting Favorite Sports Team Alerts

This menu option allows you to select your favorite teams, organized by leagues, so that you will be alerted later when your favorite teams are playing on other channels. Once selected, you will be alerted when games that those teams are playing in can be heard on a SiriusXM channel.

1 In the SiriusXM Settings screen, touch [Favorite Team Setup].
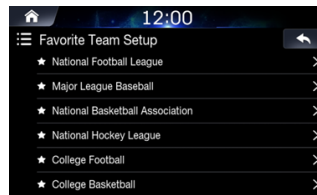
2 Select the desired league.
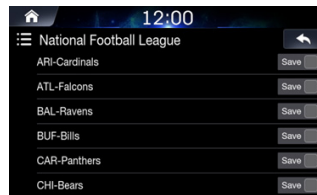
3 Check/uncheck the [Save] box to save/delete team.

- When the team is saved, popup screen of the Total saved teams, and Remaining number of saving slots is displayed for two seconds, then the team is saved as a Favorite Team.
- When you uncheck the [Save] box to delete an Alert, a confirmation popup is displayed.
- The maximum number of saved Teams, Artists, and Songs is 50. For details on how to register an Artist alert or Song alert, see "Saving Song/Artist Alert" on page 27.

When the number of registered Teams, Artist, and Songs exceeds 50

If you try to save an alert after 50 alerts have been saved, a popup is displayed, asking whether you want to replace a saved Artist/Song/Team with the new one.

1 **Touch [YES].**
The list of saved Artists/Songs/Teams is displayed.
• *If you want to cancel the saving of your Favorite Team, then touch [NO], and return to step 3.*

2 **Select the alert you want to replace.**
Popup screen of confirmation is displayed for 2 seconds, then the team is saved as a Favorite Team.

Setting Featured Favorite Update Notification On/Off

This menu option allows you to temporarily disable Featured Favorite Update Alert.

1 **Uncheck the [On] box to disable the alert.**
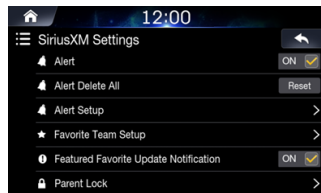
2 **Check the [Off] box to enable the alert.**

Setting Parent Lock

You can lock out channels with passcode protection. Channels that are locked cannot be accessed without entering the passcode. You can unlock a channel or change the passcode using this menu option.

1 **In the SiriusXM Settings screen, touch [Parent Lock].**
A passcode input screen is displayed.

2 **Enter a 4-digit passcode.**
The initial default 4-digit passcode is set to 0000.
After entering the digit, it is displayed as "*" (asterisk).
• *Touch [<-] to delete an entered number.*
• *Touch [Delete All] to delete all entered numbers.*

3 **Touch [Done].**

Setting the Lock status of individual channels

1 **Touch [Locked Channel].**
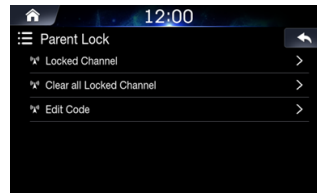
2 **Check/uncheck [On] or [Off] of the channels list to set the Parental Lock Off/On.**
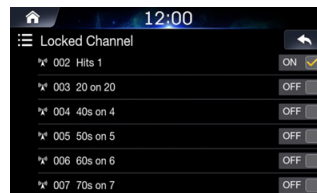
Clearing the Lock of ALL the locked Channels

1 **Touch [Clear All Locked Channels].**

2 **Touch [YES] to clear the lock of all the locked channels.**
Touch [NO] to cancel.

Changing the Lock Passcode

1 **Touch [Edit Code].**
The numeric keypad screen is displayed.

2 **Enter a 4-digit passcode.**
The initial passcode is set to 0000.
- Touch [<-] to delete an entered number.
- Touch [Delete All] to delete all entered numbers.

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

4 **Now use the keypad to enter the new 4-digit passcode.**

5 **Touch [Done].**

6 **Then use the keypad to enter the new 4-digit passcode a second time to verify it.**

7 **Touch [Done].**

- Remember to keep a note of the passcode in a safe place in case you forget the code.
- The passcode is reset to '0000' upon restoring factory default settings.

Signal Strength Information

While listening to a SiriusXM Channel, the Signal strength of the current channel will be displayed.

This menu item displays the SiriusXM signal strength as Strong, Good, Weak or No Signal.
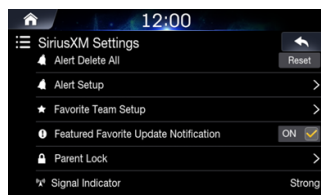
- If the Signal Indicator reports Weak or No Signal and your vehicle is parked outside with no obstructions to the southern sky, then your SiriusXM antenna may not be properly installed or may have become damaged.

AUX Setup

You can set up the items related to the Auxiliary device.

In the Setup screen, touch [AUX].
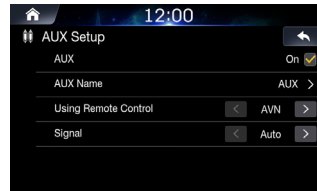
- These settings cannot be changed when AUX is the current audio source.
- These settings are only available when "AUX" is set to "On".

Turning AUX On/Off

Check the [Off] box to turn the feature on.
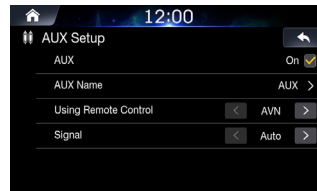
Uncheck the [On] box to turn the feature off.

Setting AUX Name

1 In the AUX Settings screen, touch [AUX Name].

2 Select the desired name.
AUX / AUX DVD / GAME / External DVD / DVD Changer / DVB-T / TV / USB Player

Using Remote Control

1 Set the [Using Remote Control] menu to AVN or RSE to use the remote control.
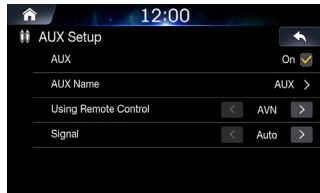
2 Set this menu to [AVN] or [RSE].

• *AVN : AUX is operated through the remote controller signal from the Remote Sensor.*

• *RSE : AUX is operated using the remote controller signal delivered from the device connected with the RSE.*

Setting Signal

You can switch the visual input signal system.
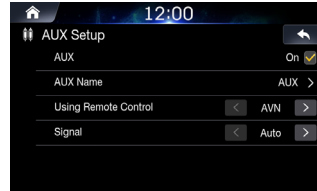
Select the desired option.

• *Auto: the video input signal type (NTSC or PAL) will be automatically selected.*

• *NTSC/PAL: choose the video input signal type manually.*

HDMI Settings

You can set the name of an external device connected via HDMI.

1 In the Setup screen, touch [HDMI].
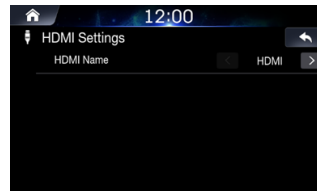
2 Select the desired name.
• *HDMI: set when a smartphone is connected via HDMI.*
• *DVD: set when an external DVD player is connected.*

• *This setting cannot be changed when HDMI is the current audio source.*

Camera Settings

You can set up items related to the Camera.

In the Setup screen, touch [Camera].
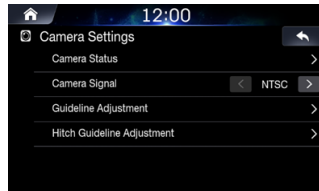
Setting Camera Status

You can set the camera input.

1 **In the Camera Settings screen, touch [Camera Status].**
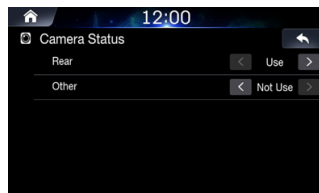
2 **Set whether to use rear camera or other cameras.**
- *Rear: Rear camera*
- *Other: Side camera, Room camera, etc.*

Setting Camera Signal

You can switch the video input signal system.

Select the desired option.

- *Auto: the video input signal type (NTSC or PAL) will be automatically selected.*
- *NTSC/PAL: choose the video input signal type manually.*

Setting Camera Guideline

The camera guideline can be changed when connected to Rear View Camera.
This item cannot be selected when the rear camera status is set to "Use" or "Not Use".

1 **In the Camera Settings screen, touch [Guideline Adjustment].**
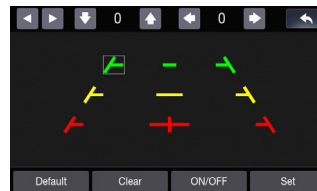
2 **Touch the guideline you intend to adjust.**
Guideline can also be selected by touching [◄, ►].

- *You cannot adjust the position of the yellow guideline in the Center independently.*
  It is controlled by a system to be the Center of the two yellow guidelines on the left and right, or the central green line and red guide line.

3 **Touch [▲, ▼, ◄, ►] to adjust the position of the guideline.**

- *Touching [Clear] clears adjustments and returns to the setting before guideline alteration.*

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

■ **Turning Guideline Display On/Off**

1. Select the guideline.

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

3. To turn the guideline on, touch [On/Off] again.

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

■ **Returning Guideline to Default**

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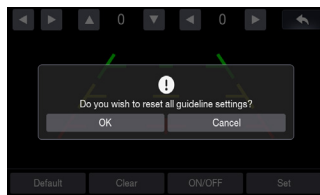
2. Touch [OK].
Adjusted values will return to default settings

■ **Setting Hitch Guideline**

1. In the Camera Settings screen, touch [Hitch Guideline Adjustment].
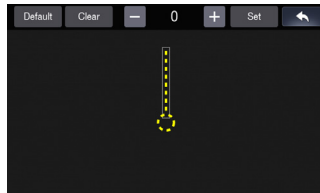
2. Touch the guideline you intend to adjust.
Guideline can also be selected by touching [▲,▼].

3. Touch [+, -] to adjust the position of the guideline.

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

Connectivity Settings

This menu allows you to set the car connectivity of your system.

In the Setup screen, touch [Connectivity].

Setting Android Auto

1 **In the Connectivity Settings screen, touch [Android Auto].**
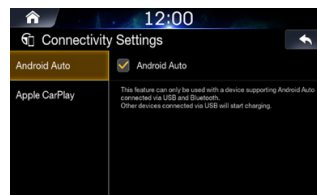
2 **Check to use your Android phone with Android Auto.**

If Android Auto is checked, you can use the functions of your Android phone with a USB cable and Bluetooth connected. It enables the Android Auto functions.

• *While Android Auto is running, you cannot use Bluetooth Audio.*

Setting Apple CarPlay

This menu allows you to set connectivity When iPhone is connected using a USB cable.

1 **In the Connectivity Settings screen, touch [Apple CarPlay].**

2 **Select the desired option.**
• *Apple CarPlay: uses your iPhone with Apple CarPlay*
• *Bluetooth Phone/Audio and iPod: uses your iPhone in Bluetooth/iPod mode.*

• *This setting is invalid for music playing of iPhone 4S and iPod.*

Date/Time Settings

This feature is used to set the time and date shown within the system.

1 In the Setup screen, touch [Date/Time].
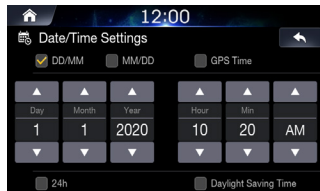
- The Date/Time feature is unavailable when GPS time is being used. To change the date/time manually, turn off the [GPS Time] feature.

2 Adjust the date and time.
- DD/MM: displays the date in order of day > month
- MM/DD: displays the in order of month > day.

Receiving GPS Time

Check the [GPS Time] box to display the received GPS Time.

- The Date/Time feature is unavailable when GPS time is being used.

Converting Time Format

Check/uncheck the [24 Hours] box to convert the digital clock display to 24 or 12 hours.

Turning Daylight Savings Time On/Off

Check the [Daylight Savings Time] box to turn the feature on.

If This Message Appears

SiriusXM

■ Check SXM Antenna
- The radio has detected a fault with the SiriusXM antenna. The antenna cable may be either disconnected or damaged.
- Verify that the antenna cable is connected to the SiriusXM Connect Vehicle Tuner.
- Inspect the antenna cable for damage and kinks. Replace the antenna if the cable is damaged.
- SiriusXM products are available at your local car audio retailer or online at http://shop.siriusxm.com.

■ Check Tuner
- The radio is having difficulty communicating with the SiriusXM Connect Vehicle Tuner. The tuner may be disconnected or damaged.
- Verify that the SiriusXM Connect Vehicle Tuner cable is securely connected to the radio

■ No SXM Signal
- The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal.
- Verify that your vehicle is outdoors with a clear view of the sky.
- Verify that the SiriusXM magnetic mount antenna is mounted on a metal surface on the outside of the vehicle.
- Move the SiriusXM antenna away from any obstructions.
- Inspect the antenna cable for damage and kinks.
- Consult the SiriusXM Connect Vehicle tuner installation manual for more information on antenna installation. Replace the antenna if the cable is damaged. SiriusXM products are available at your local car audio retailer or online at www.shop.siriusxm.com.

■ Subscription Updated
- The radio has detected a change in your SiriusXM subscription status. Press "OK" to clear the message.
- In the U.S.A., visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription. In Canada, visit www.siriusxm.ca or call 1-877-438-9677 if you have questions about your subscription.

■ Channel <xxx> Not Available
- The channel that you have requested is not a valid SiriusXM channel or the channel that you were listening to is no longer available. You may also see this message briefly when first connecting a new SiriusXM Connect Vehicle tuner.
- Visit www.siriusxm.com for more information about the SiriusXM channel lineup.

■ Channel <xxx> Not Subscribed
- The channel that you have requested is not included in your SiriusXM subscription package or the channel that you were listening to is no longer included in your SiriusXM subscription package.
- In the U.S.A., visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription package or would like to subscribe to this channel. In Canada, visit www.siriusxm.ca/activate or call Customer Care at 1-888-539-7474.

■ Channel <xxx> Locked
The channel that you have requested is Locked by the radio Parental Control feature. See "Setting Parent Lock" for more information on the Parental Control feature and how to access locked channels.

■ Replay Memory Full
- Buffer for Replay is full.

■ Replay Memory Near Full
- Buffer for Replay will full within 11 seconds.

Camera Operation

When an optional camera is connected, video of the camera view can be output to the screen of this unit.
Front camera or Rear camera can be connected to this unit.
Set the Camera Status Setting (Rear or Other) according to your connected camera.

Rear camera:

If an HCE-C127D/HCE-C157D/HCE-C252RD, etc., camera is connected, when the vehicle is reversed, the rear camera view (guide marks for vehicle width and available distance) is displayed automatically on the screen of this unit.

Other camera:

Set when connecting to a camera other than the Rear camera, such as a front camera.

> You can adjust the quality of the camera image. Setting items: Brightness / Color / Contrast/Hue. Refer to "Visual Settings".

Rear Camera Operation

Displaying the Rear Camera Image from the Menu Screen

1 **Press the All Menus ⊞ button.**
Or in the Home screen, touch [All Menus].

2 **Touch [Camera].**
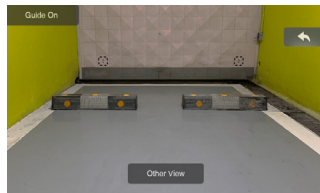
• Touch [←] to return the previous screen.

• You can perform a Guideline Adjustment. For details, see "Setting Camera Guideline".

• The guidelines will be displayed (or hidden) depending on whether the Guide is turned On/Off.

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 perform a Guideline Adjustment. For details, see "Setting Camera Guideline".

Guideline Display On/Off

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.

Hitch Guideline Display On/Off

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 [Hitch Guide On] on the Rear camera display screen.
The hitch guideline is displayed, and then the [Hitch Guide On] switch changes to [Hitch Guide Off].

3. Touch [Hitch Guide Off] to turn off the guide.

Switching the Front Camera Image

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 [Other View] on the Rear camera display screen.
The Front Camera View is displayed, and then the [Other View] switch changes to [Rear View].

3. Touch [Rear View] to display the Rear Camera View.

About the Rear Camera Guideline

To display the guideline, turn guideline on. Also, to adjust the guide, see "Setting Camera Guideline".
You can also turn off the guideline 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 visualise the car's width and distance from the rear bumper.
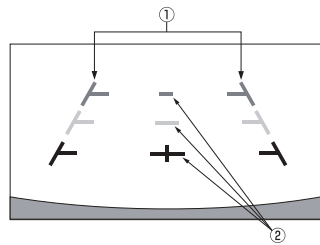
1. Car width extension marks (red, yellow and green in order of distance)
If properly calibrated, the marks indicate the car's width. This helps guide the car's path when backing up in a straight line.
The marks represent the distance from the rear of the car (from the rear end of the bumper).

The marks do not move in synchronisation with the steering wheel. Set the marks to suit the car's width.

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 synchronisation with the steering wheel.*
  • *We recommend that you measure the actual distance to the marks when parked on a level surface.*

• *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.*

■ 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.

In the following example, the distance to A is 0.5 m and the distance to B is 1 m.

<Screen>

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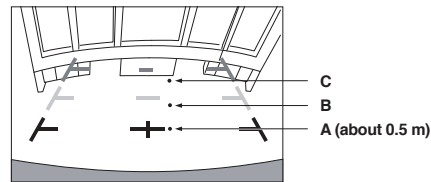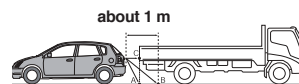
In the screen, according to the distance guidance marks, the truck seems to be parked about 1 m away (at the position B). In actual fact, however, if you reversed to position A, you would collide with the truck.
In the screen, positions A, B and C seem to be located in order of proximity. However, in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

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>

Distance guidance marks

<Situation of the car>

Actual distances

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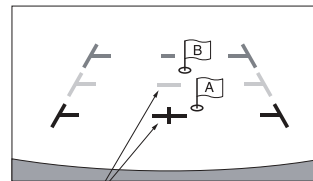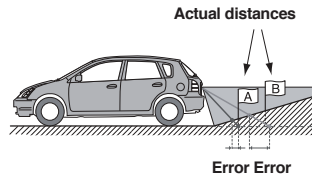
The distance guidance mark represents the distance to a flat road surface. Therefore, in the case of an upward slope behind the car, the distance guides are displayed closer to the rear bumper than the actual distance. For example, if there is an obstacle on the upward slope, it may appear farther away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

<Situation of the car>

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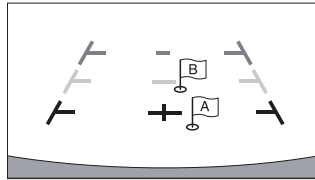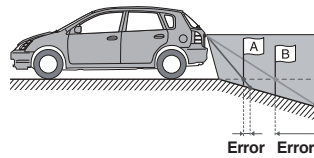
In the case of a downward slope behind the car, the distance guides are displayed farther from the rear bumper than the actual distance.
If there is an obstacle on the downward slope, it seems closer than its actual position.
Also, an error may occur between the guidance and the actual path of the car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

Information

Product Software Update

This product use software that can be updated through a USB flash drive. Download the software from the Alpine website and update the product using the USB flash drive.

Updating this product

Check the Alpine website for details on updating.
http://www.alpine-europe.com

Important information on the software
About the software license of the product

The software installed in the product contains open-source software. See the following Alpine website for details on the open source software.
http://www.alpine.com/e/research/oss/

Cautions about Discs

Moisture Condensation
You may notice the disc playback sound wavering due to condensation. If this happens, remove the disc from the player and wait about an hour for the moisture to evaporate.

Damaged Disc
Do not attempt to play cracked, warped, or damaged discs. Playing a bad disc could severely damage the playback mechanism.

Never Attempt the Following
Do not grip or pull out the disc while it is being pulled back into the player by the automatic reloading mechanism.
Do not attempt to insert a disc into the unit when the unit power is off.
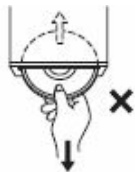
Inserting Discs
Your player accepts only one disc at a time for playback. Do not attempt to load more than one disc.
Make sure the label side is facing up when you insert the disc. "Disc error" will be displayed on your player if you insert a disc incorrectly. If "Disc error" continues to be displayed even though the disc has been inserted correctly, push the RESET switch with a pointed object such as a ballpoint pen.
Playing a disc while driving on a very bumpy road may result in skips, but this will not scratch the disc or damage the player.

Irregular Shaped Discs
Do not grip or pull out the disc while it is being pulled back into the player by the automatic reloading mechanism.
Do not attempt to insert a disc into the unit when the unit power is off.

New Discs
To prevent the disc from jamming, "Disc error" is displayed if discs with irregular surfaces are inserted or if discs are inserted incorrectly. When a new disc is ejected immediately after initial loading, use your finger to feel around the inside of the center hole and outside edge of the disc. If you feel any small bumps or irregularities, this could inhibit proper loading of the disc. To remove the bumps, rub the inside edge of the hole and outside edge of the disc with a ballpoint pen or other such instrument, then insert the disc again.
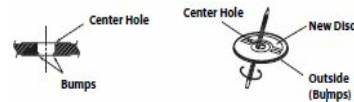
Installation Location
Make sure the unit will not be installed in a location subjected to:
- Direct sun and heat
- High humidity and water
- Excessive dust
- Excessive vibrations

Correct Handling
Do not drop the disc while handling. Hold the disc so you will not leave fingerprints on the surface. Do not affix tape, paper, or gummed labels to the disc. Do not write on the disc.
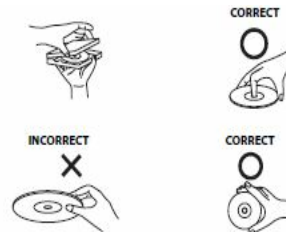
Disc Cleaning
Fingerprints, dust, or soil on the surface of the disc could cause the DVD player to skip. For routine cleaning, wipe the playing surface with a clean, soft cloth from the center of the disc to the outer edge. If the surface is heavily soiled, dampen a clean, soft cloth in a solution of mild neutral detergent before cleaning the disc.

89-EN

Disc Accessories

There are various accessories available on the market for protecting the disc surface and improving sound quality. However, most of them will influence the thickness and/or diameter of the disc. Using such accessories can cause operational problems. We recommend not using these accessories on discs played in Alpine DVD players.

Transparent Sheet   Disc Stabiliser

Discs Playable on This Unit

Playable Discs
The discs listed below can be played on this unit.

	Mark (logo)	Recorded Content	Disc size
DVD Video		Audio + Video	12 cm*
Music CD		Audio	12 cm
Video CD		Audio + Video	12 cm

* Two-layer DVD disc compatible

Discs that cannot be played
DVD-ROMs, 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)
This DVD player will play back any disc whose region number is 2 (or All). DVDs with a region number other than those listed below, cannot be played on this DVD player.

Video CDs
This DVD 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-Recordables)/CD-RWs (CDReWritables) 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.

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.

Tips for making your own discs
The unit plays DVD Video, Video CD, Audio CD and has a built in MP3/WMA/AAC decoder.
The following information is designed to help you create your own music CDs (either Audio CD or MP3/WMA/AAC encoded CD-R/ RW files).
What is the difference between an Audio and MP3/WMA/AAC CD?
An Audio CD is the same format as the commercial CDs you buy in the store (also known as CD-DA). MP3 (MPEG Audio Layer 3)/ WMA (Windows Media Audio)/AAC (Advanced Audio Coding) is a data file that uses a compression scheme to reduce the size of the music file*.
* If the first session on a disc containing both CD-DA data and MP3/WMA/AAC data is a CD-DA file, only CD-DA files will be played.

Multisession CD-R/RW:
Once a recording has been stopped, this is considered one session.
If the disc is not closed (finalized), additional data may be added.
Once this additional data has been recorded, this becomes a "multisession" CD.
Properly formatted MP3/WMA/AAC Discs:
Use ISO9660 formatting to insure proper playback. You may use standard ISO naming Level 1 (8.3 DOS standard), Level 2 (32 characters) or Joliet (Windows or Macintosh long filenames) file naming conventions*.
* Please consult the Owner's manual for additional information.

On handling compact discs (CD/CD-R/CD-RW)
- Do not touch the surface.
- Do not expose the disc to direct sunlight.
- Do not affix stickers or labels.
- Clean the disc when it is dusty.
- Make sure that the disc is smooth and flat.
- Do not use commercially available disc accessories.

Do not leave the disc in the car or the unit for a long time. Never expose the disc to direct sunlight.
Heat and humidity may damage the disc and you may not be able to play it 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 finalized (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 utilising 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 to +70°C

  DVD+R/DVD+RW: +5 to +55°C

About the Supported Formats

For the list of video formats supported from a USB flash drive, see "About USB Video format" (page 45).

About MP3/WMA/AAC/FLAC/OGG/APE/MP2

⚠ Caution

Except for private use, duplicating audio data (including MP3/WMA/AAC/FLAC 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.

What is MP3?
MP3, whose official name is "MPEG Audio Layer 3," is a compression standard prescribed by the ISO, the International Standardisation Organisation and MPEG which is a joint activity institution of the IEC.

MP3 files contain compressed audio data. MP3 encoding is capable of compressing audio data at extremely high ratios, reducing the size of music files to as much as one-tenth their original size. This is achieved while still maintaining near CD quality. The MP3 format realises such high compression ratios by eliminating the sounds that are either inaudible to the human ear or masked 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 for "Advanced Audio Coding," and is a basic format of audio compression used by MPEG2 or MPEG4.

What is FLAC?
FLAC (Free Lossless Audio Codec) is an audio file codec for lossless compression, developed and offered as open source software. Codecs with lossy compression forms, such as MP3 and AAC, reduce part of the data to improve compression efficiency. However, FLAC can reconstruct compressed data to be an identical copy of the original data by performing lossless compression. The compression ratio of FLAC is about 50%.

Method for creating MP3/WMA/AAC/FLAC (USB Flash drive) files
Audio data is compressed using software with MP3/WMA/AAC/ FLAC (USB Flash drive) codecs. For details on creating MP3/WMA/ AAC/ FLAC (USB Flash drive) files, refer to the user's manual for that software.
MP3/WMA/AAC/FLAC (USB Flash drive) files that are playable on this device have the file extensions.
MP3: "mp3"
WMA: "wma"
AAC: "aac"
FLAC: "flac"/"fla"
OGG: "ogg"
APE: "ape"
MP2: "mp2"
WMA is not supported for the following files, Windows Media Audio Professional, Windows Media Audio 10 std or Windows Media Audio 10 Pro Lossless.

There are many different versions of the AAC format. Confirm that the software being used conforms to the acceptable formats listed above. It's possible that the format may be unplayable even though the extension is valid.
Playback of AAC files encoded by iTunes is supported.

Supported playback sampling rates and bit rates
MP3 (USB Flash drive)
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 (USB Flash drive)
Sampling rates: 48 kHz, 44.1 kHz, 32 kHz, 22.05 kHz, 16 kHz, 11.025 kHz, 8 kHz
Bit rates: 48 - 320 kbps
AAC (USB Flash drive)
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: 16 - 320 kbps
FLAC (USB Flash drive)
Sampling rates: 96kHz, 88.2kHz, 48kHz, 44.1kHz, 32kHz, 24kHz, 22.05kHz, 16kHz, 8kHz
Channel number: 1ch, 2ch
This device may not play back correctly depending on sampling rates.

OGG (USB Flash drive)
Sampling rates: Up to 48kHz
Bit rates: 8 - 500 kbps

APE (USB Flash drive)
Sampling rates: Up to 48kHz
Channel number: 1ch, 2ch

MP2 (USB Flash drive)
Sampling rates: Up to 48kHz
Bit rates: 16 - 384 kbps

ID3 tags/WMA tags
This device supports ID3 tag v1.0, v1.1, v2.2, v2.3, v2.4, and WMA tag Ver.1.x. If tag data is in an MP3/WMA/AAC file, this device can display the title (track title), artist name, and album name ID3 tag/WMA tag data.
For non-supported characters, "?" is displayed.
The number of characters may be limited, or not correctly displayed, depending on the tag information.

Playing back MP3/WMA/AAC/FLAC
MP3/WMA/AAC/OGG/APE/MP2 files are prepared, then written to a USB flash drive.
• Maximum numbers of playable files/folders USB Flash drive: 5,000 files/ 2,000 folders (including Root Folder)

• Largest playable file size: 512 MB

Playback may not be performed if a disc exceeds the limitations described above.
If a file/folder name is long, the maximum possible number of files may decrease.
• Both Audio and Video files are counted if their formats are playable on this unit.

Media supported
Media devices supported
This unit can play back supported files from a USB flash drive, iPod, iPhone or Android phone connected to the unit.

Corresponding File Systems
This device supports FAT 16/32.
The maximum nested folder depth is 15 (including the root directory).
File names are limited to 256 characters (including the extension).
Valid characters for folder/file names are letters A-Z (all caps), numbers 0-9, and '_' (underscore), Special Characters ~!@#$%^&()+`-=;',.{} (except : \/:*?"<>I).

Order of files
Files are played back in the order that the writing software writes them to the disc. Therefore, the playback order may not be what's expected. Verity the writing order in the software's documentation.
The playback order of the folders and files is as follows. (The following numbers may differ from actually displayed numbers.)
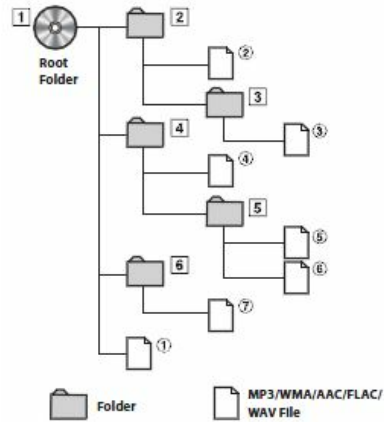
Terminology
Bit rate
This is the "sound" compression rate specified for encoding. The higher the bit rate, the higher the sound quality, but also the larger the files.

Sampling rate
This value shows how many times per second the data is sampled (recorded). For example, music CDs use a sampling rate of 44.1 kHz, so the sound is sampled (recorded) 44,100 times per second. The higher the sampling rate, the higher the sound quality, but also the larger the volume of data.

Encoding
Converting music CDs, WAVE (AIFF) files, and other sound files into the specified audio compression format.

Tag
Song information such as track titles, artist names, album names, etc., written into MP3/WMA/AAC/FLAC/OGG/APE/MP2 (USB flash drive) files.

Root folder
The root folder (or root directory) is found at the top of the file system.
The root folder contains all folders and files. It is created automatically for all burned discs.

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.*
- Internal micro-computer malfunctioned due to interference noise, etc.
  - *Press the RESET switch with a ballpoint pen or other pointed article.*

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 Auxiliary Device 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 "Using Remote Control" (page 82) is not set to this unit ("AVN")
  - *Set for "AVN"*

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.
  - *Make sure the tuner is in DX mode.*
- 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.*

USB Audio

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

Picture is unclear or noisy.
- 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.)*

Rear Seat Entertainment System

DVD sound is not being output from the rear monitor headphones.
- The external audio processor and DVD Player (DVE-5300) are optically connected.
  - *Set the Audio Out of the DVD Player to "LPCM."*

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 89)*

Unable to fast-forward or fast-reverse 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 (finalization) has not been performed.

  - *Perform finalization and attempt playback again.*

Error displays.
• Mechanical error.

  - *Press ⏏ . 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 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", 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.*

Playback does not start.
• Disc is loaded upside-down.

  - *Check the disc and load it with the labeled 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.*
• Parental lock is set.

  - *Cancel the parental lock or change the rating level.*

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.*

Navigation

The Navigation cannot work properly.
• Reset Navigation system.

  - *Turn the ignition key off, and then set to ON again.*

Error Messages

Various messages are displayed on the screen during operation. In addition to the messages telling you the current status or providing guidance for the next operation, there are also the following error messages. If one of these error messages is displayed, carefully follow the instructions in the solution column.

System

If you are driving, please pull over and park before using this function.
• A setup operation, etc., was attempted while the vehicle was running.

  - *Move the vehicle to a safe location, stop, and engage the parking brake, then carry out this operation.*

Unknown Error
  - *If the USB video file is damaged or the codec is unknown, please check if the video file can be played.*

This format is not supported.
• A USB Video file that is not supported by this unit is selected.

  - *Check if the video file is playable by seeing "Supported USB Video Format" (page 45).*

Audio/Visual

The device does not support media function.
• An iPod/iPhone/Android Phone that is not supported by the unit is connected.

  - *Connect an iPod/iPhone/Android Phone that is supported by the unit.*
  - *Reset the iPod.*
• A USB device that is not supported by the unit is connected.

  - *Attempt to connect another USB flash drive.*
• Communication error.

  - *Turn the ignition key off, and then set to ON again.*
  - *Check the display by reconnecting between the iPod/iPhone/Android Phone and the unit, using the iPod/iPhone/Android Phone cable.*
  - *Check the display by reconnecting between the USB flash drive and the unit.*
• Caused by the iPod/iPhone/Android Phone Software Version not being compatible with this unit.

  - *Update the iPod/iPhone/Android Phone Software Version to be compatible with this unit.*
• The iPod/iPhone/Android Phone is not verified.

  - *Change to another iPod/iPhone/Android Phone.*

There are no Media files available.
• There are no data in the iPod/iPhone/Android Phone.

  - *Download data to the iPod/iPhone/Android Phone and connect to the unit.*
• There are no data in the USB flash drive.

  - *Download data to the USB flash drive and connect to this unit.*
• If Android Auto does not work properly after the Android Phone Connect

  - *Please disconnect and reconnect your smartphone and try again.*

Bluetooth

Connection Error.
• Please delete device from your Phone and Navigation system then try again.

• The Bluetooth audio device was not connected correctly.

   - *Check the settings for the unit and the Bluetooth audio device and reconnect.*

Unable to download phonebook.
• Phonebook failed to read due to mobile phone disconnection, etc.

   - *Check the mobile phone connection, and then conduct synchronising and adding again. (See page 61)*
• The connected mobile phone does not support synchronising of its phone book.

   - *Connect the mobile phone that supports synchronising the phone book, then synchronise again. (See page 61)*

DISC

Disc Load Error
• When the inserted disc CD is not read properly

   - *Re-insert disc again to check*
   - *Check if the disc is a normal disc*

Region error
• When inserting a DVD with unsupported Region Code

   - *Check the region code of the DVD CD*

Unknown Error
• Displayed when an unknown error occurs on the inserted Disc CD.

   - *Check if the Disc CD is damaged*
   - *Check if the Disc CD is inserted correctly*

This file is not supported.
• Displayed when attempting to play unsupported media file (codec, etc.)

   - *Check the media files in Disc CD*
   - *Check if Codec or file is supported*

There is no media files.
• Displayed if there is no playable media file

   - *Check if there is media file exists in the Disc CD*

Specifications

MONITOR SECTION

Screen Size	6.5" (INE-W970HD)
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	87.7 – 107.9 MHz
Mono Usable Sensitivity	9.3 dBf (0.8 µV/75 ohms)
50 dB Quieting Sensitivity	13.5 dBf (1.3 µV/75 ohms)
Alternate Channel Selectivity	80 dB
Signal-to-Noise Ratio	65 dB
Stereo Separation	35 dB

AM TUNER SECTION

Tuning Range	530 – 1,710 kHz
Usable Sensitivity	25.1 µV/28 dBf

USB SECTION

USB requirements	USB 2.0
Max. Power Consumption	1,500 mA (CDP Support)
USB Class	USB (Mass Storage Class)
File System	FAT16/32
Decoding Format	MP3/WMA/AAC/FLAC/OGG/APE/MP2
Number of Channels	2-Channels (Stereo)
Frequency Response*1	5 – 20,000 Hz (±1 dB)
Total Harmonic Distortion	0.016% (at 1 kHz)
Dynamic Range	95 dB (at 1 kHz)
Signal-to-Noise Ratio	85 dB
Channel Separation	75 dB (at 1 kHz)

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

HDMI SECTION

Input Format	480p/720p

GPS SECTION

GPS Reception frequency	1,575.42 ±1 MHz
GPS Reception sensitivity	-130 dBm max.

Bluetooth SECTION

Bluetooth Specification	Bluetooth V4.0
Frequency band	2,402 – 2,480 MHz
Output Power	'-6~+4 dBm Ave. (Power class 2)
Profile	HFP (Hands-Free 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)
Power Output	16 W RMS × 4*2

- Power output: measured at 4 Ohms and ≤ 1% THD+N
- S/N: 80 dBA (reference: 1 W into 4 Ohms)

Audio output level	
Preout (Front, Rear):	4V/10k ohms (max.)
Preout (Subwoofer):	4V/10k ohms (max.)
Weight (unit only)	2.05kg

CHASSIS SIZE

Width	178 mm
Height	100 mm
Depth	142 mm

NOSE SIZE (FACE PLATE W/O)

Width	178 mm
Height	100 mm
Depth	21.3 mm

DISC AUDIO SECTION

File Format	MP3, WMA7, WMA8, WMA9
Extensions	mp3, wma
Bit rate	16kbps ~ 320 kbps
Sampling Rate	8K~ 48 KHz
Frequency response (20Hz ~ 20KHz)	0±1dB
Signal to Noise radio	≥ 85dB
THD (Total harmonic distortion)	≤ 0.06%
Dynamic Range (1kHz)	≥ 80dB
R/L Cross sound	≥ 75dB

DISC IMAGE SECTION

File Format	JPEG, PNG, GIF, BMP
Extensions	JPEG, PNG, GIF, BMP

DISC VIDEO SECTION

File Format	AVI, MPG, FLV,DAT, VOB, MP4, MOV, OGG, ASF
Extensions	avi, mpg, mpeg,dat, flv, vob, mp4, mov, ogg, asf
Video Codec	MP4V, MPEG-1, MSVC, MPEG-1/MPEG-2, H.263,
Video	720*480/576 (30fps)
Resolution	Response Sampling Rate : 8,11.025, 16,22.05, 24, 32, 44.1, 48 KHz. Response Bitrate : 45~500Kbps. (WMA : 8K~48KHz, 16kbps~320kbps)
Audio Codec	Dolby Digital(AC3),WMA/PCM/LPCM,AAC LC (2ch),MPEG-Audio,(MP1/MP2/MP3) LPCM, uLaw/aLaw, OGG, WMA
Subtitles	SMI
Unsupported files	1. Video with OGG 2. Audio formats other than Vorbis with OGG 3. Vorbis format in AVI

CVBS	
Video Signal Level	0.7±0.1 V p-p
Sync Level	0.3±0.1 V p-p
Video Out Level	1.0±0.1 V p-p
S-VIDEO Level	
Y	1.0±0.1
C	0.3±0.1

- 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.

END USER LICENSE AGREEMENT (HERE)

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//////ALPINE.

LIMITED WARRANTY

ALPINE ELECTRONICS OF AMERICA, INC. ("Alpine"), is dedicated to quality craftsmanship and is pleased to offer this Warranty. We suggest that you read it thoroughly. Should you have any questions, please contact your Dealer or contact Alpine at one of the telephone numbers listed below.

● PRODUCTS COVERED:

This Warranty covers Car Audio Products and Related Accessories ("the product"). Products purchased in the Canada are covered only in the Canada. Products purchased in the U.S.A. are covered only in the U.S.A.

● LENGTH OF WARRANTY:

This Warranty is in effect for one year from the date of the first consumer purchase.

● WHO IS COVERED:

This Warranty only covers the original purchaser of the product, who must reside in the United States, Puerto Rico or Canada.

● WHAT IS COVERED:

This Warranty covers defects in materials or workmanship (parts and labor) in the product.

● WHAT IS NOT COVERED:

This Warranty does not cover the following:

① Damage occurring during shipment of the product to Alpine for repair (claims must be presented to the carrier).

② Damage caused by accident or abuse, including burned voice coils caused by over-driving the speaker (amplifier level is turned up and driven into distortion or clipping). Speaker mechanical failure (e.g. punctures, tears or rips). Cracked or damaged LCD panels. Dropped or damaged hard drives.

③ Damage caused by negligence, misuse, improper operation or failure to follow instructions contained in the Owner's manual.

④ Damage caused by act of God, including without limitation, earthquake, fire, flood, storms or other acts of nature.
Any cost or expense related to the removal or reinstallation of the product.

⑤ Service performed by an unauthorized person, company or association.

⑥ Any product which has the serial number defaced, altered or removed.

⑦ Any product which has been adjusted, altered or modified without Alpine's consent.

⑧ Any product not distributed by Alpine within the United States, Puerto Rico or Canada.

⑨ Any product not purchased from an Authorized Alpine Dealer.

● HOW TO OBTAIN WARRANTY SERVICE:

① You are responsible for delivery of the product to an Authorized Alpine Service Center or Alpine for repair and for payment of any initial shipping charges. Alpine will, at its option, repair or replace the product with a new or reconditioned product without charge. If the repairs are covered by the warranty, and if the product was shipped to an Authorized Alpine Service Center or Alpine, Alpine will pay the return shipping charges.

② You should provide a detailed description of the problem(s) for which service is required.

③ You must supply proof of your purchase of the product.

④ You must package the product securely to avoid damage during shipment. To prevent lost packages it is recommended to use a carrier that provides a tracking service.

● HOW WE LIMIT IMPLIED WARRANTIES:

ANY IMPLIED WARRANTIES INCLUDING FITNESS FOR USE AND MERCHANTABILITY ARE LIMITED IN DURATION TO THE PERIOD OF THE EXPRESS WARRANTY SET FORTH ABOVE AND NO PERSON IS AUTHORIZED TO ASSUME FOR ALPINE ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT.

● HOW WE EXCLUDE CERTAIN DAMAGES:

ALPINE EXPRESSLY DISCLAIMS LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES CAUSED BY THE PRODUCT. THE TERM "INCIDENTAL DAMAGES" REFERS TO EXPENSES OF TRANSPORTING THE PRODUCT TO THE ALPINE SERVICE CENTER, LOSS OF THE ORIGINAL PURCHASER'S TIME, LOSS OF THE USE OF THE PRODUCT, BUS FARES, CAR RENTALS OR OTHERS COSTS RELATING TO THE CARE AND CUSTODY OF THE PRODUCT. THE TERM "CONSEQUENTIAL DAMAGES" REFERS TO THE COST OF REPAIRING OR REPLACING OTHER PROPERTY WHICH IS DAMAGED WHEN THIS PRODUCT DOES NOT WORK PROPERLY. THE REMEDIES PROVIDED UNDER THIS WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS.

● HOW STATE/PROVINCIAL LAW RELATES TO THE WARRANTY:

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state and province to province. In addition, some states/provinces do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages. Accordingly, limitations as to these matters contained herein may not apply to you.

● IN CANADA ONLY:

This Warranty is not valid unless your Alpine car audio product has been installed in your vehicle by an Authorized Installation Center, and this warranty stamped upon installation by the installation center.

● HOW TO CONTACT CUSTOMER SERVICE:

Should the product require service, please call the following number for your nearest Authorized Alpine Service Center.

CAR AUDIO	1-800-ALPINE-1 (1-800-257-4631)
NAVIGATION	1-888-NAV-HELP (1-888-628-4357)

Or visit our website at; http://www.alpine-usa.com

ALPINE ELECTRONICS OF AMERICA, INC., 1500 Atlantic Boulevard, Auburn Hills, Michigan 48326, USA
Do not send products to this address.
Call the toll free telephone number or visit the website to locate a service center.