IMPORTANT
Please record the serial number of your unit in the space provided below and keep it as a permanent record.

SERIAL NUMBER:

ISO SERIAL NUMBER: AL

INSTALLATION DATE:

INSTALLATION TECHNICIAN:

PLACE OF PURCHASE:

For details on all functions, refer to the Owner’s Manual stored in the supplied CD-ROM. (As it is data CD, the CD cannot be used for playing back music and images on the player.) If required, an ALPINE dealer will readily provide you with a print out of the Owner’s Manual contained in the CD-ROM.
WARNING

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

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

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

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

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

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

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

DO NOT DISASSEMBLE OR ALTER.

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

USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND.

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

USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES.

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

DO NOT BLOCK VENTS OR RADIATOR PANELS.

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

USE THIS PRODUCT FOR MOBILE 12V APPLICATIONS.

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

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

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

MAKE THE CORRECT CONNECTIONS.

Failure to make the proper connections may result in fire or product damage.

BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL.

Failure to do so may result in electric shock or injury due to electrical shorts.

DO NOT SPlice INTO ELECTRICAL CABLES.

Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock. Failure to take such precautions may result in fire.

DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES.

When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

DO NOT USE BOLTS OR NUTS IN THE BRAKE OR STEERING SYSTEMS TO MAKE GROUND CONNECTIONS.

Bolts or nuts used for the brake or steering systems (or any other safety-related system), or tanks should NEVER be used for installations or ground connections. Using such parts could disable control of the vehicle and cause fire, etc.

CAUTION

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

HALT USE IMMEDIATELY IF A PROBLEM APPEARS.

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

HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS.

The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the dealer where you purchased this product to have the work done.

USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY.

Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally, or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED BY A SHARP METAL EDGE.

Route the cables and wiring away from moving parts (like the seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wire’s insulation from being cut by the metal edge of the hole.

DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST.

Avoid installing the unit in locations with high incidence of moisture or dust. Moisture or dust that penetrates into this unit may result in product failure.
Getting Started

Touch operation
You can operate the system by using the touch panel on the screen.

Common onscreen buttons
- Returns to the previous screen. Depending on the function, this button may cancel the operations performed on the screen.
- Closes the window.

Location of Controls

1. ▲ (Eject) button
   Ejects a disc.

2. ▲/▼ (UP/DOWN) button
   Press to adjust the volume.

3. MUTE/ button
   Press to activate /deactivate the mute mode. Press and hold for at least 3 seconds to turn the power off.

4. / (Phone)/VOICE CTRL. button
   Recalls the Telephone Menu screen. When a voice dial compatible hands-free phone is connected, press and hold for at least 3 seconds to switch to the Voice Dial screen.

5. ▶/ ◀/ button
   This action varies according to the Audio/Visual source. (Track Up/Down, Fast reverse/Fast forward, etc.)

6. ◀/ ▶ button
   Each time you press this button, the Navigation mode and the Audio/Visual Source mode are changed alternately. Press and hold for at least 3 seconds to activate the Quick Sound screen. For details of navigation operations, refer to "Navigation System OM" in the CD-ROM.

7. DISC Slot

8. RESET switch
   The system of this unit is reset.

9. Remote Sensor
   Point the remote control transmitter towards the remote sensor within a range of 2 metres.
Turning Power On or Off

1. Turn the ignition key to the ACC or ON position.
   The system is turned on.

2. Press and hold the MUTE button for at least 3 seconds to turn the power off.
Radio Operation

- **Decreases frequency**
- **Preset button**
  - Displays the preset stations with a short touch.
  - Touch for at least 2 seconds to memorise the current station as a preset station.
- **Changes tuning mode**
- **Seek mode indicator**
- **Traffic Information mode On/Off**
- **Memorises stations automatically**
- **Displays Select PTY screen**
- **RDS information display**
- **Increases frequency**
- **Switches band**
- **Changes operation button**
- **Changes text information**
- **RDS indicator**
- **PRIORITY NEWS mode On/Off**
- **AF mode On/Off**

MP3/WMA/AAC Operation

- **Finds the beginning of the current file/Finds a previous file within one second after playback starts/Fast-reverses when touched for at least 2 seconds**
- **Current song no./Total song no.**
- **Displays the search screen**
- **Playing time**
- **Pause and Playback**
- **Finds beginning of previous folder**
- **Finds beginning of next folder**
- **MP3/WMA/AAC information display**
- **Random Play**
- **Repeat Playback**
- **Displays the search screen**
When you touch the DVD playback screen, the DVD operation screen is displayed. The following is an example of the DVD-VIDEO operation screen.

- **Finds the beginning of the current chapter/Finds a previous chapter within one second after playback starts/Fast-reverses when touched for at least 2 seconds**
- **Switches Angle**
- **Displays numeric keypad input mode screen**
- **Switches Audio Tracks**
- **Displays Top Menu screen**
- **Playing time**
- **Pause and Playback**
- **Stop Playback**
- **Switches Subtitles**
- **Displays Menu screen**
- **Displays Menu control screen**
- **DVD information display-1**
- **Repeat Playback**
- **Displays Menu screen**
- **Displays Menu control screen**

---

**Audio**

- **Artwork display**
  - Finds the beginning of next chapter/Fast-forwards when touched for at least 2 seconds
  - Current track
  - Displays tracks
  - Playing time
  - Finds beginning of next chapter/Fast-forwards when touched for at least 2 seconds
  - Displays Menu control screen
  - Displays Menu screen

---

**Search**

- **For example**
  - To
  - To

---

*Playback*
Searching for a Music File

For example: Searching by Artist name

2. Touch [Artists].
3. Touch the desired artist’s name.
4. Touch the desired album’s name.
5. Touch the desired song’s name.

* Playback starts from the position (time) you touch on the time bar.
Owner’s manual USB Memory (Optional)

You can play back music files (MP3/WMA/AAC) and video files (DivX®) stored in a USB memory device on the internal player of this system. Refer to the "MP3/WMA/AAC Operation" (page 5) for information on music.

Video mode

Finds the beginning of the current file/Finds a previous file within one second after playback starts/Fast-reverses when touched for at least 2 seconds

Finds the beginning of next file/Fast-forwards when touched for at least 2 seconds

Displays the search screen

Playing time

Repeat Playback

Pause and Playback

Displays the search screen

Switches Subtitles

Changes operation button

Switches Audio Tracks

Changes operation button

- DivX® files stored in a USB memory device and protected by DRM (Digital Rights Management) cannot be played.
- Some DivX files stored in a USB memory cannot be operated/played.
Hands-Free Phone Control

Hands-free calls are possible when using an HFP (Hands-Free Profile) compatible mobile phone with the INE-W990BT.

How to connect to a BLUETOOTH compatible device (Pairing)

The BLUETOOTH function is always available on this unit. You can, therefore, search for a BLUETOOTH device for pairing at any time.

1. Touch [Setup] icon of Top banner.
2. Touch [BLUETOOTH].
3. Touch [Set Bluetooth Device].
4. Touch [Search] of “No Device.”
5. Touch [Audio], [Hands-free] or [Both] of the device you want to connect from the list.

6. When the device registration is complete, a message appears and the device returns to normal mode.
   - You can register up to 3 BLUETOOTH compatible mobile phones.
   - The BLUETOOTH registration process differs depending on the device version and SSP (Simple Secure Pairing). If a 4 or 6 character Passcode appears on this device, enter the Passcode using the BLUETOOTH compatible device. If a 6 character Passkey appears on this device, make sure the same passkey is displayed on the BLUETOOTH compatible device and touch “Yes.”

Answering a Call

1. An incoming call triggers the ringtone and an incoming call display.
2. Touch [Call] or press (Phone) button.

Hanging up the Telephone

1. Touch [End].

Muting the Speech Volume

You can temporarily lower the microphone level to 0.

   - During the mute mode, [Mute] is highlighted. Touch [Mute] again to cancel the mute mode.
Map Functions

Below is an overview of different buttons and icons on the map display. For more detailed information about this screen, please see the Owner’s Manual.

Navigation Menu

To access the Navigation Menu, touch [MENU].

Route
Get route information, edit the route (set, delete, optimise waypoints, optimise route), see the route overview, avoid special sections, specific roads, the route ahead, save, load, delete the route, simulate navigation, change route settings, check for the itinerary and for max. 7 route alternatives.

Go to
Set destinations using any of 9 different input methods (Find Address, Postcode, Find Places (POI), Map, Address book, History, Coordinate, Picture, Free-form Search).

Information
Get access to useful add-ons like Picture Viewer, Unit Converter, Calculator, Trip Monitor, Fuel Consumption, Country Information.

Settings
Allows you to customize various characteristics of your navigation system’s look and feel.
**Go to a Destination**

The following example briefly describes how to input a destination.

1. **Touch [Go to] from Navigation Menu.**

   ![Go to Menu](image)

   - You can touch [Results] to display the candidate list.

2. **Select a destination input method. ([Find Address] is selected.)**

   ![Select Address](image)

3. **To change the country, touch the button with the country name. Enter a country name and select the country from the list.**

   ![Select Country](image)

   - You can touch [Results] to display the candidate list.

4. **Type in the city name or postcode until displayed in the selection list. Select the matching entry.**

   ![Type Entry](image)
5 Type in the street name until displayed in the selection list. Select the matching entry.

- You can touch [Results] to display the candidate list.

6 Enter a house number. Touch [Done] to access the confirmation screen.

7 Touch [Select] to initialize route calculation and start navigation.
**Installation**

- When making connections to the vehicle's electrical system, be aware of the factory installed components (e.g. on-board computer). Do not tap into these leads to provide power for this unit. When connecting the INE-W990BT to the fuse box, make sure the fuse for the intended circuit of the INE-W990BT has the appropriate amperage. Failure to do so may result in damage to the unit and/or the vehicle. When in doubt, consult your Alpine dealer.

1. Install at an angle between horizontal and 30°. Note that installing at an angle outside of this range will result in a loss of performance and possibly damage.

2. Mounting the GPS Antenna inside the vehicle.
   1. Clean the mounting location.
   2. Put on the GPS Antenna mounting plate.
   3. Mount the GPS Antenna.

3. Mounting the Microphone.
   For safe use, make sure of the following:
   - location is stable and firm.
   - driver's view and operations are not obstructed.
   - microphone is located where the driver's voice can be easily picked up (on the sun visor, etc.).

   When you speak into the microphone, you should not have to change your driving posture. This may cause a distraction, taking your attention away from safely driving your vehicle. Carefully consider direction and distance while mounting the microphone. Confirm that the driver's voice can be easily picked up at the selected location.

   ![Microphone Mounting Diagram]

- Mount the GPS Antenna on a flat plane of the dash board or rear tray.
- Some thermal reflection type or thermal absorption type glass may interrupt high frequency waves. If reception is poor with the antenna installed inside the car, try to mount the antenna outside the car.
- Make sure the GPS Antenna is not covered (obstructed) by any metallic surface or object.
4 Remove the mounting sleeve from the main unit.

Slide the unit into the mounting sleeve and secure it.

5 When your vehicle has the Bracket, mount the long hex bolt onto the rear panel of the INE-W990BT and put the Rubber Cap on the hex bolt. If your vehicle does not have the Mounting Support, reinforce the head unit with the metal mounting strap (not supplied). Secure the ground lead of the unit to a clean metal spot using a screw (*1) already attached to the vehicle’s chassis. Connect all the leads of the INE-W990BT according to details described in the Connections section.

*1 If the installed mounting sleeve is loose in the dashboard, the pressure plates may be bent slightly to remedy the problem.

*2 The supplied face plate may be mounted.

For the screw marked “2,” use an appropriate screw for the chosen mounting location.

6 Slide the INE-W990BT into the dashboard until it clicks. This ensures that the unit is properly locked and will not accidentally come out from the dashboard.
Connection Diagram of SPST Switch (sold separately)

(If the ACC power supply is not available)

- If your vehicle has no ACC power supply, add an SPST (Single-Pole, Single-Throw) switch (sold separately) and fuse (sold separately).
- The diagram and the fuse amperage shown above are in the case when INE-W990BT is used individually.
- If the switched power (ignition) lead of the INE-W990BT is connected directly to the positive (+) post of the vehicle's battery, the INE-W990BT draws some current (several hundred milliamperes) even when its switch is placed in the OFF position, and the battery may be discharged.
Connections

Connections 1/2
Connections 2/2

Connect this to the optional Vehicle Display Interface box

Microphone (Included)

To steering remote control interface box

To Camera with RCA Output terminal

To remote input lead

CAMERA (Yellow)

REMOTE OUT (Brown)

AUX OUTPUT (Yellow)

To Rear Monitor Input terminal

Amplifier

Rear Left

Rear Right

Front Left

Front Right

Subwoofers

Connect this to the optional Vehicle Display Interface box
### Specifications

**MONITOR SECTION**
- **Screen Size**: 6.1"
- **LCD Type**: Transparent type TN LCD
- **Operation System**: TFT active matrix
- **Number of Picture Elements**: 1,152,000 pcs. (800 × 3 × 480)
- **Effective Number of Picture Elements**: 99% or more
- **Illumination System**: LED

**FM TUNER SECTION**
- **Tuning Range**: 87.5 – 108.0 MHz
- **Mono Usable Sensitivity**: 8.1 dBf (0.7 μV/75 ohms)
- **50 dB Quieting Sensitivity**: 12 dBf (1.1 μV/75 ohms)
- **Alternate Channel Selectivity**: 80 dB
- **Signal-to-Noise Ratio**: 65 dB
- **Stereo Separation**: 35 dB
- **Capture Ratio**: 2.0 dB

**MW TUNER SECTION**
- **Tuning Range**: 531 – 1,602 kHz
- **Usable Sensitivity**: 25.1 μV/28 dBf

**LW TUNER SECTION**
- **Tuning Range**: 153 – 281 kHz
- **Sensitivity (IEC Standard)**: 31.6 μV/30 dBf

**USB SECTION**
- **USB requirements**: USB 1.1/2.0
- **Max. Power Consumption**: 1,000 mA
- **USB Class**: USB (Play From Device)/USB (Mass Storage Class)
- **File System**: FAT16/32
- **MP3 Decoding**: MPEG-1/2 AUDIO Layer-3
- **WMA Decoding**: Windows Media™ Audio
- **AAC Decoding**: AAC-LC format “.m4a” file
- **Number of Channels**: 2
- **Frequency Response**
  - DVD: 666 nm
  - CD: 785 nm
- **Laser power**: CLASS II

**PICKUP**
- **Wave length**: DVD: 666 nm
- **Laser power**: CD: 785 nm

**GPS SECTION**
- **GPS Reception frequency**: 1575.42 ± 1 MHz
- **GPS Reception sensitivity**: -130 dB

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

**GENERAL**
- **Power Requirement**: 14.4 V DC (11–16V allowable)
- **Operating temperature**: -20°C to + 60°C
- **Maximum Power Output**: 50 W × 4
- **Weight**: 2.12 kg
- **Audio output level**
  - Preout (Front, Rear): 4 V/10k ohms (max.)
  - Preout (Subwoofer): 4 V/10k ohms (max.)

**CHASSIS SIZE**
- **Width**: 178 mm
- **Height**: 100 mm
- **Depth**: 165 mm

**NOSE SIZE**
- **Width**: 170 mm
- **Height**: 96 mm
- **Depth**: 11.5 mm

- 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.

**CD/DVD SECTION**
- **Frequency Response**: 5 – 20,000 Hz (±1 dB)
- **Wow & Flutter**: Below measurable limits
- **Total Harmonic Distortion**: 0.006% (at 1 kHz)
- **Dynamic Range**: 95 dB (at 1 kHz)
- **Signal-to-Noise Ratio**: 100 dB
- **Channel Separation**: 85 dB (at 1 kHz)
- **Horizontal resolution**: 500 lines or greater
- **Video output level**: 1Vp-p (75 ohms)
- **Video S/N ratio**: DVD: 60 dB
- **Audio S/N ratio**: 100 dB

### 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.

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