Guide for Installation and Connections

Guide d’installation et de connexions

Guía de instalación y conexiones
PRECAUTIONS

GUIDE FOR INSTALLATION AND CONNECTIONS

• Please read this GUIDE FOR INSTALLATION AND CONNECTIONS and the OWNER’S MANUAL thoroughly to familiarize yourself with each control and function. We at ALPINE hope that your new PXA-H900 will give you many years of listening enjoyment.
In case of problems when installing your unit, please contact your authorized ALPINE dealer.

Points to Observe for Safe Usage

• Read this manual carefully before starting operation and use this system safely. We cannot be responsible for problems resulting from failure to observe the instructions in this manual.
• This manual uses various pictorial displays to show how to use this product safely and to avoid harm to yourself and others and damage to your property.
Here is what these pictorial displays mean. Understanding them is important for reading this manual.

• Meaning of displays

| ![Warning]   | This symbol means important instructions. Failure to heed them can result in serious injury or death. |
| ![Caution]  | This symbol means important instructions. Failure to heed them can result in injury or property damage. |

⚠️ Warning

DO NOT DISASSEMBLE OR ALTER. Doing so may result in an accident, fire or electric shock.

USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES. Failure to do so may result in fire or electric shock.

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

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

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

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

DO NOT SPLICE INTO ELECTRICAL CABLES. Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.
DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES. When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

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

DO NOT INSTALL THE MONITOR NEAR THE PASSENGER SEAT AIR BAG. If the unit is not installed correctly the air bag may not function correctly and when triggered the air bag may cause the monitor to spring upwards causing an accident and injuries.

DO NOT BLOCK VENTS OR RADIATOR PANELS. Doing so may cause heat to build up inside and may result in fire.

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

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

⚠️ Caution

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

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

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

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

- Be sure to disconnect the cable from the (--) battery post before installing your PXA-H900. This will reduce any chance of damage to the unit in case of a short-circuit.
- Be sure to connect the color coded leads according to the diagram. Incorrect connections may cause the unit to malfunction or damage to the vehicle’s electrical system.
- When making connections to the vehicle’s electrical system, be aware of the factory installed components (e.g. on-board computer). Do not tap into these leads to provide power for this unit. When connecting the PXA-H900 to the fuse box, make sure the fuse for the intended circuit of the PXA-H900 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.
- The PXA-H900 uses female RCA-type jacks for connection to other units (e.g. amplifier) having RCA connectors. You may need an adaptor to connect other units. If so, please contact your authorized ALPINE dealer for assistance.

Wiring Connections
Improper wiring connections could cause serious damage to your audio system. Be sure you:
1. DO NOT connect (--) wires from left and right speakers together.
2. DO NOT ground any speaker wires.
3. DO NOT run wires where they may be pinched or cut.
4. DO NOT leave bare speaker terminals exposed. They may contact the vehicle chassis and cause a short.

Fuse
When replacing the fuse(s), the replacement fuse must be of the same amperage as shown on the fuse holder. If the fuse(s) blows more than once, carefully check all electrical connections for shorted circuitry. Also have your vehicle’s voltage regulator checked. Do not attempt to repair the unit yourself; return it to your Alpine dealer or nearest Alpine Service Station for servicing.

Temperature
In order to ensure proper performance, be sure the temperature in your vehicle is above 14 F (-10 C) and below 140 F (60 C) before turning your unit on. Good air circulation is essential to prevent internal heat build-up in the unit.
To prevent external noise from entering the audio system.

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

IMPORTANT
Please record the serial number of your unit in the space provided below and keep it as a permanent record. The serial number plate is located on the bottom of the unit.

SERIAL NUMBER: __________________________
INSTALLATION DATE: ______________________
INSTALLATION TECHNICIAN: __________________
PLACE OF PURCHASE: ________________________
Accessories

- Ai-NET cable (6m)
- Display cable (6m)
- Stand Microphone
- Terminal board cover
  - Connection Cable
  - Spacer
  - Bracket
  - Spare fuse (7.5A)
  - Hexagonal wrench (M2.6)
  - Velcro tape for mounting remote control unit holder
  - Velcro tape for mounting stand
  - Battery (AAA)
  - Flanged self-tapping screw (M4 x 14)
  - Hexagon screw (M4 x 10)
  - Pan screw (M3 x 5)
  - Flat head screw (M5 x 8)
  - Remote control
  - Remote control unit holder
  - Screw for mounting remote control unit holder (M2.9 x 20)
  - Side bracket
  - Inner case
  - Flush mount
  - Pan screw (M2.6 x 6)
  - Self-tapping screw (M2.6 x 8)
  - One on each side
  - Face plate
Installation

• Mounting the display

1. Remove the face plate.

2. Use a screwdriver, etc., to remove the lock pin, then take out the inner case.

3. Mount the display using the included screws.

4. Mount the formerly removed inner case onto the dashboard, then also mount the display unit.
1. After step 2 on page 7, remove the included side bracket.

2. Mount the display using the included screws.

3. Once the spacer and bracket are mounted on the display, securely mount the bracket that was removed from the vehicle to the display.
• Mounting with the flush mount

1. Make holes approximately 178 (width) by 50 (height) mm in size in the dashboard, etc.

**WARNING:** When making holes, be careful not to damage pipes, tanks, electric wires, etc. Doing so could lead to accidents or fire.

2. After step 2 on page 7, remove the included side bracket.

3. Remove the spacer from the bracket.

4. Mount the spacer on the display using the included screws.

5. Mount the flush mount on the display using the included screws, then mount this on the dashboard, etc.
• Mounting the base unit

1. Decide on the place of installation.
   • The trunk room, etc., is the best place.

2. Mark the positions of the mount screws at the place of installation.

3. Use a drill to make holes 3 mm in diameter or smaller.

   **WARNING:** When making holes, be careful not to damage pipes, tanks, electric wires, etc. Doing so could lead to accidents or fire.

4. Securely mount the unit using the four included tapping screws (M4 x 14).

Mounting Microphone

**Mounting Location**
Mount the microphone on the rear-view mirror, headrest, sun visor, or other appropriate location.

1. Peel off the protective papers from the adhesive side of the Velcro fasteners. Attach 2 pieces of the Velcro fasteners on to the microphone holder base and the other side of the Velcro fastener on the spot where the microphone holder base is located.

2. Insert the microphone into the Y-shaped holder on the holder base.
• Mounting the remote control unit holder

• If the remote control unit is exposed to direct sunlight, remove it from the holder and store it in the glove compartment.
• If the holder cannot be securely fastened in place with the Velcro, install it using screws.

WARNING: Do not install the product near the passenger seat's airbag. Doing so could hamper airbag operation, leading to accidents or injury.
NOTE:
Normally the various indicators are lit blue.

Dolby Digital Indicator
Lights white during Dolby Digital decoding.

PRO LOGIC Indicator
Lights white during Dolby Surround decoding.

HDCD Indicator
Lights white during HDCD decoding.

DTS Indicator
Lights white during DTS decoding.

MPEG Indicator
Lights white during MPEG2 decoding.

Computer terminal
Used to make settings and adjustments with a computer.
A special cable and computer software are required.
For details, contact your store of purchase or an Alpine Information Center.

Microphone jack
Use this to connect a microphone.

Reset switch
Use this to set whether or not settings and adjustments can be stored in the memory.

Note: Remove the 2 screws marked ★ using the included hexagonal wrench (M2.6).
Cord specifications

Connect to:

- Head unit input terminal (optical digital input)
  Used for system expansion (Ai-NET head unit, etc.).
  Connect to an Ai-NET product using an optical fiber cable.

- Changer input terminal (optical digital input)
  Used for system expansion (Ai-NET changer, etc.).
  Connect to an Ai-NET product using an optical fiber cable.

- DVD player input terminal (optical digital input)
  Used for system expansion (DVD player, etc.).
  Connect to an Ai-NET product using an optical fiber cable.

Cord colors and specifications

Connect to:

- Front tweeter speaker output jacks (PIN outputs)
  Outputs signals for driving the front tweeter speakers.
  Connect to the amplifier for the front tweeter speaker.

- Front midrange speaker output jacks (PIN outputs)
  Outputs signals for driving the front midrange speakers.
  Connect to the amplifier for the front midrange speaker.

- Front mid-bass speaker output jacks (PIN outputs)
  Outputs signals for driving the front mid-bass speakers.
  Connect to the amplifier for the front mid-bass speaker.

- Rear speaker output jacks (PIN outputs)
  Outputs signals for driving the rear speakers.
  Connect to the amplifier for the rear speaker.

- Subwoofer output jacks (PIN outputs)
  Outputs signals for driving the subwoofer.
  Connect to the amplifier for the subwoofer.

- Center speaker output jack (PIN output)
  Outputs signals for driving the center speaker.
  Connect to the amplifier for the center speaker.

- Navigation audio input jack (PIN input)
  Used to input the audio output signals of a navigation system.
  Connect to the navigation system.

- Remote ON cable
  Connect to the head unit for PIN connections.
  Used for PIN connections.

- Remote OUT cable
  Connect to the amplifier or other peripheral device.
  Used to add an amplifier.

- Illumination cable
  Lights the PXA-H900. Operates in association with the small lamp or other light.
  Connect to the vehicle's small light cord.

- Guide control cable 1
  Not used.

- Guide control cable 2
  Used to interrupt the navigation system's sound.
  Connect to the navigation system.

- Ground terminal
  Connect securely to a metal part of the vehicle's body using the ground cord.
  Connect to the vehicle's body using the ground cord.

- Battery power terminal
  Power is supplied constantly to the PXA-H900 regardless of whether the engine key is on or off.
  Connect to a cord to which power is constantly supplied.
Examples of system expansion

- PXA-H900 + CDA-7990 Head Unit + CD Changer + External Amplifier

NOTES
- For the ground cord (sold separately) and battery power cord (sold separately), pass the wires through the included terminal board cover before connecting them to the PXA-H900. After this, mount the terminal board cover on the PXA-H900.
- If the ground cord (sold separately) and battery power cord (sold separately) are only wires (if they do not have terminals), refer to “Installing with wires only (no terminals)” (page 18) to install.

Please observe the following when using Fiber Optic Cable.
- Do not coil the Fiber Optic Cable smaller than a 30mm radius.
- Do not place anything on top of the Fiber Optic Cable.

NOTES
- ★ When connecting a Optical Digital CD Changer
- ★★ When connecting a Optical Digital CD Changer, change the Digital/Analog switch of the CD Changer to “2” (Digital Output)
• PXA-H900 + Ai-NET Compatible Head Unit + CD Changer + External Amplifier

Fiber Optic Cable (Sold Separately) ★

Input Side

Fiber Optic Cable (Sold Separately) ★
Ai-NET Cable (Included with CD Changer)
Ai-NET Cable (Included)

Output Side

Ai-NET Compatible CD Changer
Ai-NET Compatible Head Unit
System Switch
To External Amplifier

+REMOTE OUT Cable
Blue
Remote ON Cable
Orange
Illumination Cable
White/green
Guide Control Cable 1
White/green
Guide Control Cable 2
Grounding Cable (Sold Separately)
Battery Power Cable (Sold Separately)

NOTES
• For the ground cord (sold separately) and battery power cord (sold separately), pass the wires through the included terminal board cover before connecting them to the PXA-H900. After this, mount the terminal board cover on the PXA-H900.
• If the ground cord (sold separately) and battery power cord (sold separately) are only wires (if they do not have terminals), refer to “Installing with wires only (no terminals)” (page 18) to install.

Please observe the following when using Fiber Optic Cable.
• Do not coil the Fiber Optic Cable smaller than a 30mm radius.
• Do not place anything on top of the Fiber Optic Cable.

NOTES
★ When connecting a Optical Digital CD Changer
★★ Used for connection to an optical digital compatible head unit.
★★★ When connecting a Optical Digital CD Changer, change the Digital/Analog switch of the CD Changer to “2” (Digital Output)
• PXA-H900 + Head Unit + Video Deck etc. + External Amplifier

• For connecting a head unit with which Ai-NET connections are not possible.

NOTES:
• When using the PXA-H900 with a non-Ai-NET head unit, +12V is required on this line to turn on the equalizer. If your head unit does not have a remote-on or power-antenna turn-on wire, an SPST switch must be connected between an ignition source and this terminal. The PXA-H900 can then be turned on using this switch. The PXA-H900 can be used with any head unit. However, only an Alpine Ai-NET compatible head unit will be able to take full advantage of all the features and functions of this processor.
• For the ground cord (sold separately) and battery power cord (sold separately), pass the wires through the included terminal board cover before connecting them to the PXA-H900. After this, mount the terminal board cover on the PXA-H900.
• If the ground cord (sold separately) and battery power cord (sold separately) are only wires (if they do not have terminals), refer to “Installing with wires only (no terminals)” (page 18) to install.
• PXA-H900 + CDA-7990 Head Unit + DVD Player + CD Changer + Navigation System + TV Monitor + External Amplifier

NOTES
- For the ground cord (sold separately) and battery power cord (sold separately), pass the wires through the included terminal board cover before connecting them to the PXA-H900. After this, mount the terminal board cover on the PXA-H900.
- If the ground cord (sold separately) and battery power cord (sold separately) are only wires (if they do not have terminals), refer to “Installing with wires only (no terminals)” (page 18) to install.
- Depending on the type of monitor used in the system, a separate RGB conversion cable (KCA-020N) may be required. In addition, connections are different from the ones shown above when connecting to an all-purpose monitor. Also refer to the operating instructions of the KCE-900E. For details, contact your store of purchase or an Alpine Information Center.

Please observe the following when using Fiber Optic Cable.
- Do not coil the Fiber Optic Cable smaller than a 30mm radius.
- Do not place anything on top of the Fiber Optic Cable.

NOTES
- When connecting a Optical Digital CD Changer
- ** When connecting a Optical Digital CD Changer, change the Digital/Analog switch of the CD Changer to “2” (Digital Output)
- *** For the guide control cord, use guide control cord 2. Do not use guide control cord 1.
Installing with wires only (no terminals)

The hexagonal screw must be used when installing with wires only (without terminals). We strongly recommend having connections made by your store of purchase. If you wish to make connections yourself, read the instructions below carefully and be sure to connect properly.

- When making connections, be sure to use the included hexagonal screw and hexagonal wrench.
- For safety, leave the power cord unplugged until all connections have been completed.
- Do not carry the PXA-H900 by its cord. The cord may be damaged and the PXA-H900 may fall.

1. Check the thickness of the wires.

NOTES:
- Use wires larger than the PXA-H900’s fuse capacity.
- Wire sizes usable with the PXA-H900 are AWG8 to AWG10.
- If you do not know the thickness of the wires, contact your store of purchase, a service shop or/and Alpine service center.

2. Peel of 7 to 10 mm of the cord’s sheathing (the insulation in vinyl or other material) and expose the core (the conductor).

![Diagram of wire connection](image)

NOTES:
- If the exposed section is too short, the current will not flow properly, resulting in the PXA-H900 not operating or breaks in the sound.
- Making the exposed section too long may lead to short-circuit.

3. Pass the wire through the terminal board cover.

4. Remove the screw mounted on the PXA-H900. Insert the cord’s core into the lead terminal and fasten it with the hexagonal screw and hexagonal wrench. The cord should now be securely fastened.

![Diagram of screw connection](image)

NOTE:
Be sure that the cord is fully inside the lead terminal and that not a single wire of its core is sticking out. If even a single wire is sticking out, this may lead to short-circuit with the vehicle’s body or the PXA-H900, resulting in fire or malfunction.

5. Mount the terminal board cover on the PXA-H900.