

# DENON

PRE-MAIN AMPLIFIER

# PMA-1500AE

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OPERATING INSTRUCTIONS

BEDIENUNGSANLEITUNG

MODE D'EMPLOI

ISTRUZIONI PER L'USO

INSTRUCCIONES DE OPERACION

GEBRUIKSAANWIJZING

BRUKSANVISNING

**IMPORTANT TO SAFETY****WARNING:**

**TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**

**CAUTION:**

**TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**CAUTION:**

- To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.  
When setting up this product, make sure that the AC outlet you are using is easily acceptable.

**VORSICHT:**

- Um dieses Gerät vollständig von der Stromversorgung abzutrennen, trennen Sie bitte den Netzstecker von der Wandsteckdose ab.  
Stellen Sie bei der Aufstellung dieses Gerätes sicher, dass die zu verwendende Wechselstrom-Steckdose leicht zugänglich ist.

**PRECAUTION:**

- Pour déconnecter complètement ce produit du courant secteur, débranchez la prise de la prise murale.  
Lors de l'installation de ce produit, assurez-vous que la prise CA que vous utilisez est compatible.

**ATTENZIONE:**

- Per scollegare definitivamente questo prodotto dalla rete di alimentazione elettrica, togliere la spina dalla relativa presa.  
Durante l'installazione, assicurarsi che la presa in CA utilizzata sia facilmente raggiungibile.

**PRECAUCIÓN:**

- Para desconectar completamente este producto de la alimentación eléctrica, desconecte el enchufe del enchufe de la pared.  
Al ajustar este producto, asegúrese de que la toma de salida de CA que esté utilizando sea fácilmente aceptable.

**VOORZICHTIGHEID:**

- Om de voeding van dit product volledig te onderbreken moet de stekker uit het stopcontact worden getrokken.  
Let er bij het plaatsen van dit product op dat het te gebruiken stopcontact goed bereikbaar is.

**FÖRSIKTIHETSMÅTT:**

- Koppla loss stickproppen från eluttaget för att helt skilja produkten från nätet.  
Vid installationen av produkten ska du se till att eluttaget den ansluts till är nära utrustningen.

**• DECLARATION OF CONFORMITY**

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards: EN60065, EN55013, EN55020, EN61000-3-2 and EN61000-3-3.  
Following the provisions of 73/23/EEC, 89/336/EEC and 93/68/EEC Directive.

**• ÜBEREINSTIMMUNGSERKLÄRUNG**

Wir erklären unter unserer Verantwortung, daß dieses Produkt, auf das sich diese Erklärung bezieht, den folgenden Standards entspricht: EN60065, EN55013, EN55020, EN61000-3-2 und EN61000-3-3.  
Entspricht den Verordnungen der Direktive 73/23/EEC, 89/336/EEC und 93/68/EEC.

**• DECLARATION DE CONFORMITE**

Nous déclarons sous notre seule responsabilité que l'appareil, auquel se réfère cette déclaration, est conforme aux standards suivants: EN60065, EN55013, EN55020, EN61000-3-2 et EN61000-3-3.  
D'après les dispositions de la Directive 73/23/EEC, 89/336/EEC et 93/68/EEC.

**• DICHIARAZIONE DI CONFORMITÀ**

Dichiariamo con piena responsabilità che questo prodotto, al quale la nostra dichiarazione si riferisce, è conforme alle seguenti normative: EN60065, EN55013, EN55020, EN61000-3-2 e EN61000-3-3.  
In conformità con le condizioni delle direttive 73/23/EEC, 89/336/EEC e 93/68/EEC.

**• DECLARACIÓN DE CONFORMIDAD**

Declaramos bajo nuestra exclusiva responsabilidad que este producto al que hace referencia esta declaración, está conforme con los siguientes estándares: EN60065, EN55013, EN55020, EN61000-3-2 y EN61000-3-3.  
Siguiendo las provisiones de las Directivas 73/23/EEC, 89/336/EEC y 93/68/EEC.

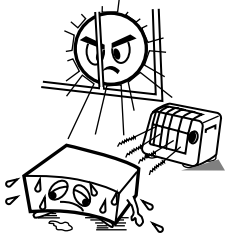
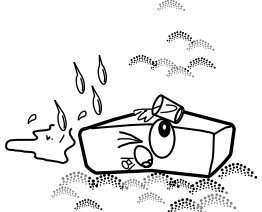
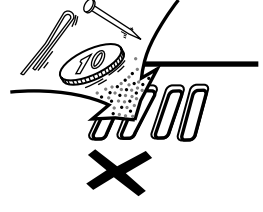
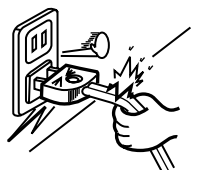
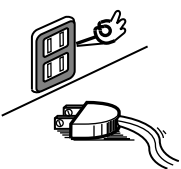
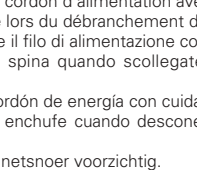
**• EENVORMIGHEIDSVERKLARING**

Wij verklaren uitsluitend op onze verantwoordelijkheid dat dit product, waarop deze verklaring betrekking heeft, in overeenstemming is met de volgende normen: EN60065, EN55013, EN55020, EN61000-3-2 en EN61000-3-3.  
Volgens de bepalingen van de Richtlijnen 73/23/EEC, 89/336/EEC en 93/68/EEC.

**• ÖVERENSSTÄMMELSESINTYG**

Härmed intygas helt på eget ansvar att denna produkt, vilken detta intyg avser, uppfyller följande standarder: EN60065, EN55013, EN55020, EN61000-3-2 och EN61000-3-3.  
Enligt stadgarna i direktiv 73/23/EEC, 89/336/EEC och 93/68/EEC.

**NOTE ON USE / HINWEISE ZUM GEBRAUCH /  
OBSERVATIONS RELATIVES A L'UTILISATION / NOTE SULL'USO  
NOTAS SOBRE EL USO / ALVORENS TE GEBRUIKEN / OBSERVERA**

 <ul style="list-style-type: none"> <li>• Avoid high temperatures. Allow for sufficient heat dispersion when installed in a rack.</li> <li>• Vermeiden Sie hohe Temperaturen. Beachten Sie, daß eine ausreichend Luftzirkulation gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.</li> <li>• Eviter des températures élevées Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.</li> <li>• Evitate di esporre l'unità a temperature alte. Assicuratevi che ci sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio.</li> <li>• Evite altas temperaturas Permite la suficiente dispersión del calor cuando está instalado en la consola.</li> <li>• Vermijd hoge temperaturen. Zorg voor een degelijk hitteafvoer indien het apparaat op een rek wordt geplaatst.</li> <li>• Undvik höga temperaturer. Se till att det finns möjlighet till god värmeavledning vid montering i ett rack.</li> </ul>	 <ul style="list-style-type: none"> <li>• Keep the set free from moisture, water, and dust.</li> <li>• Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.</li> <li>• Protéger l'appareil contre l'humidité, l'eau et la poussière.</li> <li>• Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere.</li> <li>• Mantenga el equipo libre de humedad, agua y polvo.</li> <li>• Laat geen vochtigheid, water of stof in het apparaat binnendringen.</li> <li>• Utsätt inte apparaten för fukt, vatten och damm.</li> </ul>	 <ul style="list-style-type: none"> <li>• Do not allow foreign objects to enter the set.</li> <li>• Keine fremden Gegenstände in das Gerät kommen lassen.</li> <li>• Ne pas laisser des objets étrangers dans l'appareil.</li> <li>• E' importante che nessun oggetto è inserito all'interno dell'unità.</li> <li>• No deje objetos extraños dentro del equipo.</li> <li>• Laat geen vreemde voorwerpen in dit apparaat vallen.</li> <li>• Se till att främmande föremål inte tränger in i apparaten.</li> </ul>
 <ul style="list-style-type: none"> <li>• Handle the power cord carefully. Hold the plug when unplugging the cord.</li> <li>• Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.</li> <li>• Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon.</li> <li>• Manneggiare il filo di alimentazione con cura. Agire per la spina quando scollegate il cavo dalla presa.</li> <li>• Maneje el cordón de energía con cuidado. Sostenga el enchufe cuando desconecte el cordón de energía.</li> <li>• Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.</li> <li>• Hantera nätkablen varsamt. Håll i kablarna när den kopplas från el-uttaget.</li> </ul>	 <ul style="list-style-type: none"> <li>• Unplug the power cord when not using the set for long periods of time.</li> <li>• Wenn das Gerät eine längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.</li> <li>• Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.</li> <li>• Disinnestare il filo di alimentazione quando avete l'intenzione di non usare il filo di alimentazione per un lungo periodo di tempo.</li> <li>• Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.</li> <li>• Neem altijd het netsnoer uit het stopcontact wanneer het apparaat gedurende een lange periode niet wordt gebruikt.</li> <li>• Koppla ur nätkablarna om apparaten inte kommer att användas i lång tid.</li> </ul>	 <ul style="list-style-type: none"> <li>• Do not let insecticides, benzene, and thinner come in contact with the set.</li> <li>• Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.</li> <li>• Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.</li> <li>• Assicuratevi che l'unità non venga in contatto con insetticidi, benzolo o solventi.</li> <li>• No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.</li> <li>• Laat geen insektenverdelgende middelen, benzine of verfdunners met dit apparaat in contact komen.</li> <li>• Se till att inte insektsmedel på spraybruk, bensen och thinner kommer i kontakt med apparatens hölje.</li> </ul>
 <ul style="list-style-type: none"> <li>• Handle the power cord carefully. Hold the plug when unplugging the cord.</li> <li>• Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.</li> <li>• Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon.</li> <li>• Manneggiare il filo di alimentazione con cura. Agire per la spina quando scollegate il cavo dalla presa.</li> <li>• Maneje el cordón de energía con cuidado. Sostenga el enchufe cuando desconecte el cordón de energía.</li> <li>• Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.</li> <li>• Hantera nätkablen varsamt. Håll i kablarna när den kopplas från el-uttaget.</li> </ul>	 <p>* (For sets with ventilation holes)</p> <ul style="list-style-type: none"> <li>• Do not obstruct the ventilation holes.</li> <li>• Die Belüftungsöffnungen dürfen nicht verdeckt werden.</li> <li>• Ne pas obstruer les trous d'aération.</li> <li>• Non coprite i fori di ventilazione.</li> <li>• No obstruya los orificios de ventilación.</li> <li>• De ventilatieopeningen mogen niet worden beblokkeerd.</li> <li>• Täpp inte till ventilationsöppningarna.</li> </ul>	 <ul style="list-style-type: none"> <li>• Never disassemble or modify the set in any way.</li> <li>• Versuchen Sie niemals das Gerät auseinander zu nehmen oder auf jegliche Art zu verändern.</li> <li>• Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.</li> <li>• Non smontate mai, né modificate l'unità in nessun modo.</li> <li>• Nunca desarme o modifique el equipo de ninguna manera.</li> <li>• Nooit dit apparaat demonteren of op andere wijze modificeren.</li> <li>• Ta inte isär apparaten och försök inte bygga om den.</li> </ul>

**CAUTION:**

- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Please observe local regulations regarding battery disposal.
- Do not expose the set to dripping or splashing fluids.
- No objects filled with liquids, such as vases, shall be placed on the apparatus.

**ACHTUNG:**

- Die Belüftung sollte auf keinen Fall durch das Abdecken der Belüftungsöffnungen durch Gegenstände wie beispielsweise Zeitungen, Tischtücher, Vorhänge o. Ä. behindert werden.
- Auf dem Gerät sollten keinerlei direkten Feuerquellen wie beispielsweise angezündete Kerzen aufgestellt werden.
- Bitte beachten Sie bei der Entsorgung der Batterien die geltenden Umweltbestimmungen.
- Das Gerät sollte keinerlei Flüssigkeit, also keinem Tropfen oder Spritzen ausgesetzt werden.
- Auf dem Gerät sollten keinerlei mit Flüssigkeit gefüllten Behälter wie beispielsweise Vasen aufgestellt werden.

**ATTENTION:**

- La ventilation ne doit pas être gênée en recouvrant les ouvertures de la ventilation avec des objets tels que journaux, rideaux, tissus, etc.
- Aucune flamme nue, par exemple une bougie, ne doit être placée sur l'appareil.
- Veuillez à respecter l'environnement lorsque vous jetez les piles usagées.
- L'appareil ne doit pas être exposé à l'eau ou à l'humidité.
- Aucun objet contenant du liquide, par exemple un vase, ne doit être placé sur l'appareil.

**PRECAUZIONI:**

- Le aperture di ventilazione non devono essere ostruite coprendole con oggetti, quali giornali, tovaglie, tende e così via.
- Non posizionare sull'apparecchiatura fiamme libere, come ad esempio le candele accese.
- Prestare attenzione agli aspetti legati alla tutela dell'ambiente quando si smaltisce la batteria.
- L'apparecchiatura non deve essere esposta a gocciolii o spruzzi.
- Non posizionare sull'apparecchiatura nessun oggetto contenete liquidi, come ad esempio i vasi.

**PRECAUCIÓN:**

- La ventilación no debe quedar obstruida por hacerse cubierto las aperturas con objetos como periódicos, manteles, cortinas, etc.
- No debe colocarse sobre el aparato ninguna fuente inflamable sin protección, como velas encendidas.
- A la hora de deshacerse de las pilas, respete la normativa para el cuidado del medio ambiente.
- No se expondrá el aparato al goteo o salpicaduras cuando se utilice.
- No se colocarán sobre el aparato objetos llenos de líquido, como jarros.

**WAARSCHUWING:**

- De ventilatie mag niet worden belemmerd door de ventilatieopeningen af te dekken met bijvoorbeeld kranten, een tafelkleed, gordijnen, enz.
- Plaats geen open vlammen, bijvoorbeeld een brandende kaars, op het apparaat.
- Houd u steeds aan de milieuvoorschriften wanneer u gebruikte batterijen wegdoet.
- Stel het apparaat niet bloot aan druppels of spatten.
- Plaats geen voorwerpen gevuld met water, bijvoorbeeld een vaas, op het apparaat.

**OBSERVERA:**

- Ventilationen bör inte förhindras genom att täcka för ventilationsöppningarna med föremål såsom tidningar, bordsdukar, gardiner osv.
- Inga blottade brandkällor, såsom tända ljus, bör placeras på apparaten.
- Tänk på miljöaspekterna när du bortskaffar batteri.
- Apparaten får inte utsättas för vätska.
- Inga objekt med vätskor, såsom vaser, får placeras på apparaten.

**A NOTE ABOUT RECYCLING:**

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with your local recycling regulations. When discarding the unit, comply with your local rules or regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.

**ÜBER DAS RECYCLING:**

Das Verpackungsmaterial dieses Produktes ist für das Recycling geeignet und kann wieder verwendet werden. Bitte entsorgen Sie alle Materialien in Abhängigkeit von Ihren örtlichen Vorschriften über das Recycling.

Falls das Gerät entsorgt werden muss, beachten Sie die örtlichen Vorschriften und Gesetze. Die Batterien dürfen nicht verbrannt und auch nicht in den Hausmüll geworfen; bitte geben Sie die Batterien gemäß örtlichen Bestimmungen an den Sammelstellen oder Sondermüllplätzen ab.

**UNE REMARQUE CONCERNANT LE RECYCLAGE:**

Les matériaux d'emballage de ce produit sont recyclables et peuvent être réutilisés. Veuillez disposer de tout matériau conformément aux règlements de recyclage locaux. Quand l'appareil est mis au rancart, suivez le règle local ou le loi concernant.

Les piles ne doivent jamais être jetées ou incinérées, mais mises au rebut conformément aux règlements locaux concernant les déchets chimiques.

**NOTA RELATIVA AL RICICLAGGIO:**

I materiali di imballaggio di questo prodotto sono riutilizzabili e riciclabili. Smaltire i materiali conformemente alla normativa locale sul riciclaggio. Per smaltire l'unità, osservare la normativa in vigore nel luogo di utilizzo.

Non gettare le batterie, né incenerirle, ma smaltirle conformemente alla normativa locale sui rifiuti chimici.

**ACERCA DEL RECICLAJE:**

Los materiales de embalaje de este producto son reciclables y se pueden volver a utilizar. Disponga de estos materiales siguiendo los reglamentos de reciclaje de su localidad. Cuando se deshaga de la unidad, cumpla con las reglas o reglamentos locales. Las pilas nunca deberán tirarse ni incinerarse.

Deberá disponer de ellas siguiendo los reglamentos de su localidad relacionados con los desperdicios químicos.

**EEN AANTEKENING WAT BETREFT HET RECYCLEREN:**

Het inpakmateriaal van dit product is recycleerbaar en kan opnieuw gebruikt worden. Er wordt verzocht om zich van elk afvalmateriaal te ontdoen volgens de plaatselijke voorschriften. Volg voor het wegdoen van de speler de voorschriften voor de verwijdering van wit- en bruingood op.

Batterijen mogen nooit worden weggegooid of verbrand, maar moeten volgens de plaatselijke voorschriften betreffende chemisch afval worden verwijderd.

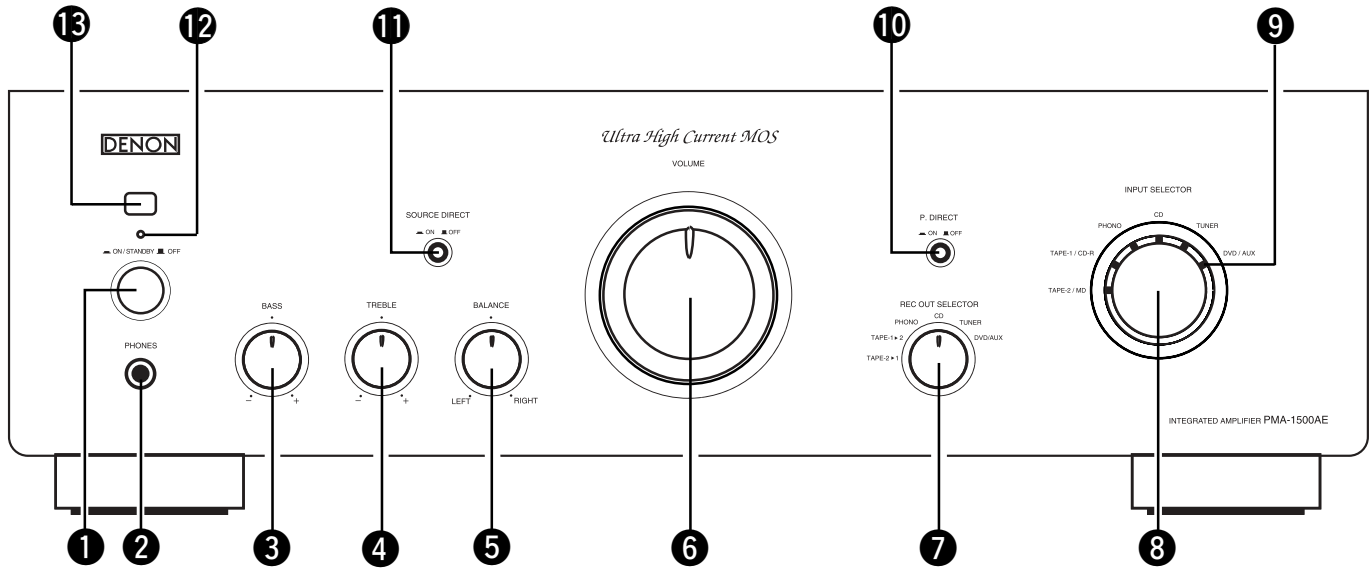
**EN KOMMENTAR OM ÅTERVINNING:**

Produktens emballage är återvinningsbart och kan återanvändas. Kassera det enligt lokala återvinningsbestämmelser. När du kasserar enheten ska du göra det i överensstämmelse med lokala regler och bestämmelser.

Batterier får absolut inte kastas i soporna eller brännas. Kassera dem enligt lokala bestämmelser för kemiskt avfall.

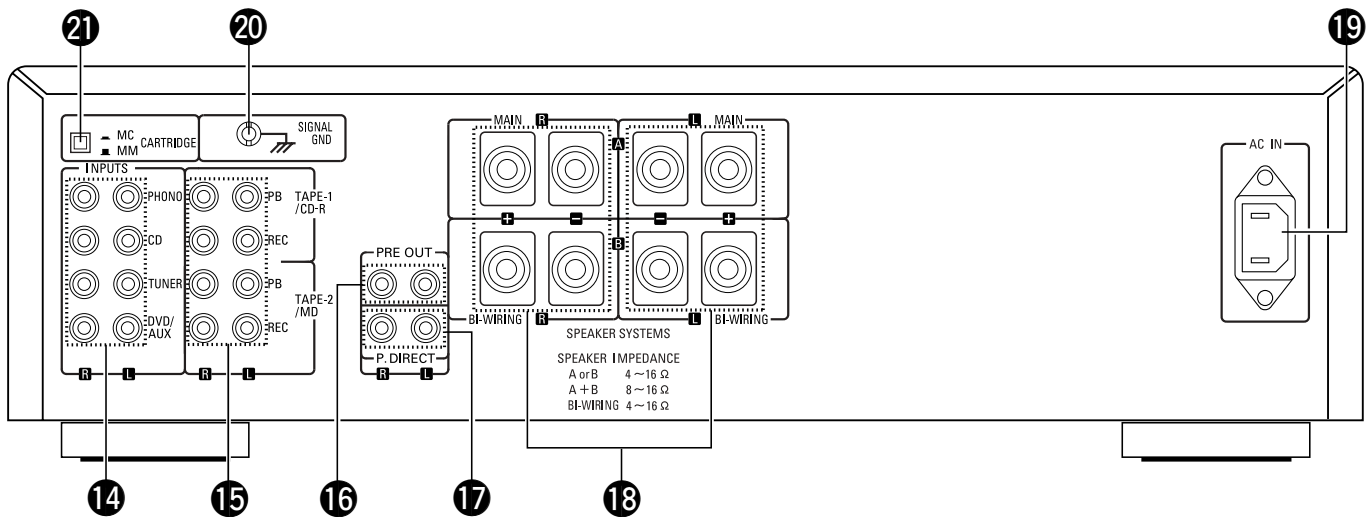
**FRONT PANEL  
FRONTPLATTE  
PANNEAU AVANT  
PANNELLO ANTERIORE**

**PANEL FRONTAL  
VOORPANEEL  
FRAMSIDA**



**REAR PANEL  
RÜCKWAND  
PANNEAU ARRIERE  
PANNELLO POSTERIORE**

**PANEL TRASERO  
ACHTERPANEEL  
BAKSIDA**



# Getting Started

Thank you for choosing the DENON PMA-1500AE Pre-main Amplifier. This remarkable component has been engineered to provide superb sound, as well as providing outstanding high fidelity reproduction of your favorite music sources.

As this product is provided with an immense array of features, we recommend that before you begin hookup and operation that you review the contents of this manual before proceeding.

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## Accessories

Please check to make sure the following items are included with the main unit in the carton:

- ① Operating instructions .....
- ② Remote control unit (RC-1022) .....
- ③ Batteries R03 (AAA) .....
- ④ Power supply cord .....
- ⑤ Service station list .....

## Before using

**Pay attention to the following before using this unit:**

### • Moving the set

To prevent short circuits or damaged wires in the connection cords, always unplug the power supply cord and disconnect the connection cords between all other audio components when moving the set.

### • Before turning the Power switch on

Check once again that all connections are proper and that there are not problems with the connection cords. Always set the power switch to the standby position before connecting and disconnecting connection cords.

### • Store these instructions in a safe place.

After reading, store these instructions along with the warranty in a safe place.

### • Note that the illustrations in these instructions may differ from the actual set for explanation purposes.

## Cautions on installation

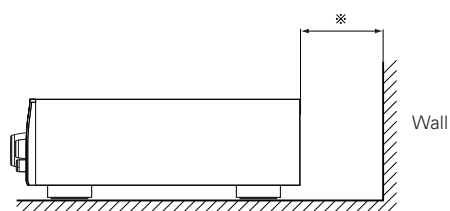
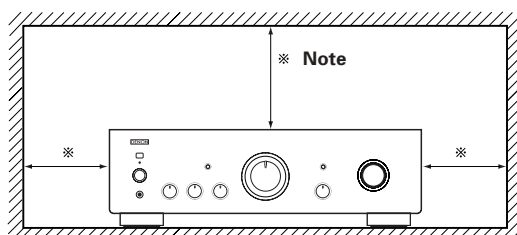
Noise or disturbance of the picture may be generated if this unit or any other electronic equipment using microprocessors is used near a tuner or TV.

If this happens, take the following steps:

- Install this unit as far as possible from the tuner or TV.
- Set the antenna wires from the tuner or TV away from this unit's power supply cord and input/output connection cords.
- Noise or disturbance tends to occur particularly when using indoor antennas or 300  $\Omega$ /ohms feeder wires. We recommend using outdoor antennas and 75  $\Omega$ /ohms coaxial cables.

### Note:

**For heat dispersal, do not install this equipment in a confined space such as a book case or similar unit.**



## Cautions on handling

### • Switching the input function when input terminals are not connected.

A clicking noise may be produced if the input function is switched when nothing is connected to the input terminals. If this happens, either turn down the MASTER VOLUME control knob or connect components to the input terminals.

### • Muting of PRE OUT terminals and SPEAKER terminals.

The PRE OUT terminals and SPEAKER terminals include a muting circuit. Because of this, the output signals are greatly reduced for several seconds after the power switch is turned on or input function, surround mode or any other set-up is changed. If the volume is turned up during this time, the output will be very high after the muting circuit stops functioning. Always wait until the muting circuit turns off before adjusting the volume.

- **Whenever the power switch is in the STANDBY state, the apparatus is still connected on AC line voltage. Please be sure to turn off the power switch or unplug the cord when you leave home for, say, a vacation.**

### NOTE:

1. Always keep the POWER switch on the main unit turned on.
2. Turn the power on and off from the remote control unit.
3. Unplug the power supply cord when you do not plan to use the unit for a long period of time.

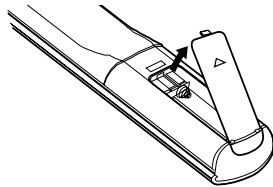
### CAUTION:

If only the Power indicator is lighting red, this means that the power is turned off from the remote control unit. Turn the power on from the remote control unit.

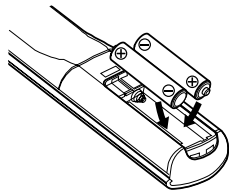
## Inserting the batteries

The accessory remote control unit is used to control the amplifier from a convenient distance.

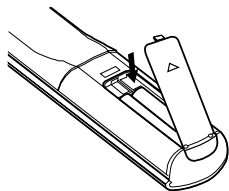
- ① Remove the battery cover on the remote control unit.



- ② Insert two dry cell batteries as shown in the diagram on the battery supply unit.



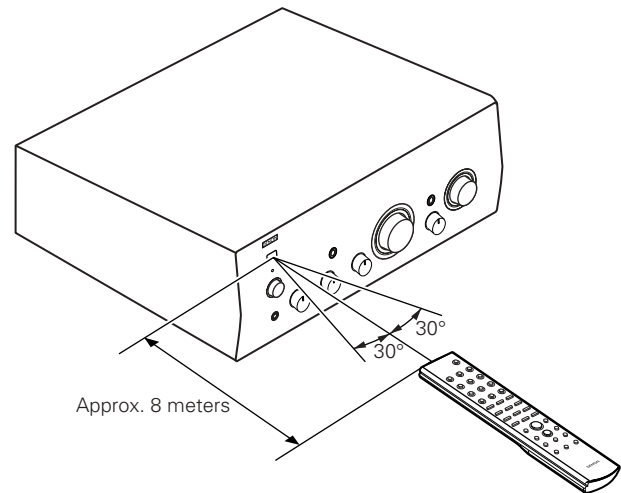
- ③ Replace the battery cover.



### Notes on battery usage

- RC-1022 uses the size R03 (AAA) dry cell batteries.
- The batteries will need to be replaced approximately once a year. This will depend upon how often the remote control unit is used.
- If, in less than a year from the time new batteries were inserted, the remote control unit fails to operate the amplifier from a near-by position, it is time to replace the batteries.  
(The included battery is only for verifying operation. Replace it with a new battery as soon as possible.)
- Insert the batteries properly, following the polarity diagram inside the battery compartment.
- Batteries are prone to damage and leakage. Therefore:
  - Do not mix new batteries with used ones.
  - Do not mix different types of batteries.
  - Do not jumper opposite poles of the batteries, expose them to heat, break them open, nor expose them to open fire.
- If the batteries have leaked, remove any traces of battery fluid from the battery compartment wiping thoroughly with a dry cloth. Then insert new batteries.

## Operating range of the remote control unit



- Operate the remote control unit while pointing it towards the remote control sensor on the amplifier as shown in the diagram on the left.
- The remote control unit can be used at distances up to about 8 meters in a straight line from the amplifier. This distance will decrease if there are obstructions blocking the infra-red light transmission or if the remote control unit is not directed straight at the amplifier.

### NOTE:

- Do not press the operating buttons on the amplifier and the remote control unit at the same time. This will cause misoperation.
- Operation of the remote control unit will become less effective or erratic if the infrared remote control sensor on the amplifier is exposed to strong light or if there are obstructions between the remote control unit and the sensor.
- In case you operate a VCR, TV or other components by remote control, do not operate buttons on two different remote control units at the same time. This will cause misoperation.

**Besides being able to operate the PMA-1500AE pre-main-amplifier with this remote control unit, you can also operate a DENON CD player from this handy remote control unit.**



## Part names and functions

### Front panel

#### 1 POWER switch

- When the POWER switch is turned ON, power is supplied to the unit. It takes a few seconds after the power is turned on for the unit to warm up. This is due to the built-in muting circuit that eliminates noise during the on/off operation.

#### 2 Headphone jack (PHONES)

- This jack is used to plug in the headphones. (The Speaker output is turned off when the headphones are plugged.)
- To prevent hearing loss, do not raise the volume level excessively when using headphones.

#### 3 BASS control knob

- This knob is used to control the bass quality of the sound. When the knob is set at the center position, the frequency characteristics are flattened in the range below 1000 Hz.
- The bass is emphasized as the knob is moved off center to the right (↻), and reduced as it is moved to the left (↺).

#### 4 TREBLE control knob

- This knob is used to control the treble quality of the sound. When the knob is set at the center position, the frequency characteristics are flattened in the range above 1000 Hz.
- The treble is emphasized as the knob is moved off center to the right (↻), and reduced as it is moved to the left (↺).

#### 5 BALANCE control knob

- This knob is used to adjust the balance between the left and right channels.
- When it is set to the center position, the amplitude of the amplifier is equal on both sides. If the volume on the right side is too low, turn the knob to the right (↻). If the volume on the left side is too low, turn the knob to the left (↺). This will achieve an even balance on the left and right sides.

#### 6 VOLUME control knob

- This knob controls the overall volume level. Turn the knob to the right (↻) to raise the volume and to the left (↺) to lower it.

#### 7 REC OUT SELECTOR knob

- Use this to select the output source for recording onto a tape deck, etc.

##### TAPE-2 ► 1: (COPY)

Use this to copy from the component connected to the TAPE-2/MD terminal to the component connected to the TAPE-1/CD-R terminal.

##### TAPE-1 ► 2: (COPY)

Use this to copy from the component connected to the TAPE-1/CD-R terminal to the component connected to the TAPE-2/MD terminal.

##### PHONO:

Used to recording from the turntable.

##### CD:

Used to recording from the CD player.

##### TUNER:

Used to recording from the tuner.

##### DVD/AUX:

Used to recording component that connected to the DVD/AUX terminals.

#### 8 INPUT SELECTOR knob

- Use these to select the program source. When the knob for the desired program source is selected, its indicator lights. One program source only can be selected at a time, as follows.

##### TAPE-2/MD:

Use this position when using the tape deck, etc., connected to the TAPE-2/MD terminals.

##### TAPE-1/CD-R:

Use this position when using the tape deck, etc., connected to the TAPE-1/CD-R terminals.

##### PHONO:

Use this position when using the record player connected to the PHONO terminals.

Use the CARTRIDGE switch to switch the sensitivity to correspond to the cartridge type being used.

##### CD:

Used to listen a CD player or other component that is connected to the CD terminals.

##### TUNER:

Used to play a component such as an FM/AM tuner or a TV tuner that is connected to the TUNER terminals.

##### DVD/AUX:

Used to play a component such as a HiFi video player, TV tuner or tape deck that is connected to the DVD/AUX terminals.

**9 Input indicator**

The Indicator for the program source selected with the INPUT SELECTOR control lights.

**NOTE:**

When the P. DIRECT button is ON position, Input indicator dose not light.

**10 P. DIRECT (Power amp direct) button****ON :**

P. DIRECT terminals selected, and input indicator is turned off.

**OFF :**

Selected INPUT SELECTOR knob makes program source play.

**NOTE:**

When selecting the P. DIRECT terminal, volume control function of this unit does not work, so set volume level by the component connecting to this terminal.

**11 SOURCE DIRECT**

- The controls (BASS, TREBLE and BALANCE ) can be used when this switch is in the OFF (■) position. When set to the ON (■) position, the above controls are by-passed and the signals are input directly to the volume control circuit, providing high quality sound.

**12 POWER indicator**

- When the POWER switch is turned ON/STANDBY(■), the power indicator lights.  
Light green : Power is on  
Light red : Power is in the standby mode

**13 Remote control sensor**

- This sensor receives the infra-red light transmitted from the wireless remote control unit.
- For remote control, point the wireless remote control unit towards the sensor.

**Rear panel****14 INPUTS terminals**

- These are INPUTS terminals for CD players, turntables, AM/FM tuners, tape decks or other playback components.

**NOTE:**

The PHONO input terminals are equipped with a short pin-plug. Remove this plug to connect a record player. Store the removed short pin-plug in a safe place so as not to lose it.

**15 REC. (REC OUT) terminals**

- These are playing and recording output terminals for connection to tape decks.

**16 PRE OUT terminals**

- Use these when adding a power amplifier, a subwoofer with built-in power amplifier, etc.
- Connect these PRE OUT terminals to the input terminals on the additional power amplifier, subwoofer, etc.

**17 P. DIRECT ( Power amp direct ) terminals**

- Source connected to this terminal is directly fed to the power amplifier set volume level by the component connected to this terminal.

**NOTE:**

Signals are outputted from the PRE OUT terminals even when using headphones.  
No signal is outputted when selecting P. DIRECT terminals.

**18 SPEAKER SYSTEMS terminals**

- Connect the speaker systems here.

**19 AC inlet receptacle (AC IN)**

- Connect the included power supply cord here.  
Do not use any other cord than the provided power supply cord.

**20 SIGNAL GND (ground) terminal**

- Connect the turntable's ground wire here.

**NOTE:**

This terminal is used to reduce noise when a turntable, etc., is connected.  
It does not provide grounding.

**21 CARTRIDGE selection switch**

- This switch is set according to the type of player cartridge to be used. Set this switch to MM (■) or MC (■) according to the type of cartridge used on your turntable.

**Remote control unit**

- The RC-1022 remote control unit can control CD players, tape decks and tuners manufactured by DENON.
- Note that operation may not be possible for some models.

**AMP block**

FUNCTION button section

- Use this to select the program source to be played.
- PHONO
- TAPE-1/CD-R
- TAPE-2/MD
- CD
- TUNER
- DVD/AUX

VOLUME button section

- +:

While this is pressed, the main unit's VOLUME control knob turns clockwise and the volume increases.

- -:

While this is pressed, the main unit's VOLUME control knob turns counterclockwise and the volume decreases.

MUTING

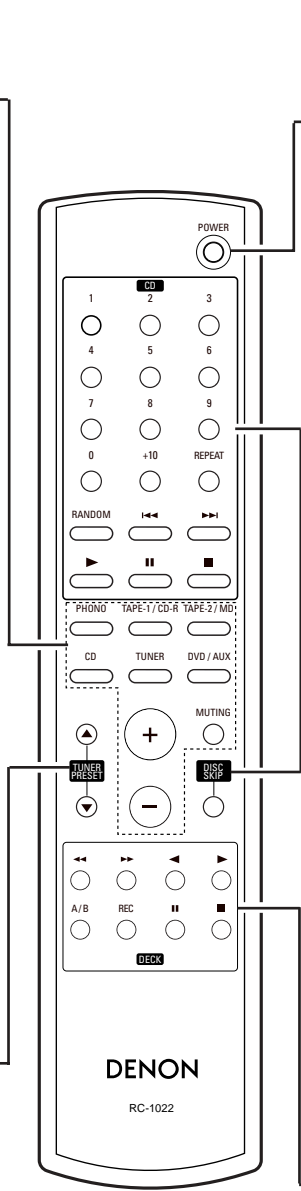
- When pressed, the main unit's POWER indicator flash red and the speaker output is turned off. When pressed again, the mute mode is cancelled and the POWER indicator light green.

**Tuner block**

- Press this button to move up or down among the preset station numbers.

**NOTE:**  
 With DENON portable CD players and some other CD players, the auto search mode is set when the ◀◀ or ▶▶ button is pressed shortly then released, and the manual search mode is set when one of the buttons is held in.

**CAUTION:**  
 Some of the functions of the PMA-1500AE can also be controlled with the remote control units included with other DENON pre-main amplifiers.



**POWER**

- When the main unit's POWER switch is set to the ON/STANDBY position (■), press this to turn the PMA-1500 AE's power on and off.
- When the power is turned off from the remote control unit, the main unit's POWER indicator lightes red, and the input Indicator turns off, indicating that the PMA-1500AE is in the standby mode.
- When the main unit's POWER switch is set to the OFF position (■) after turning the power off from the remote control unit and then set back to the ON/STANDBY position (■), the PMA-1500AE is set to the operating mode.

**CD player block**

- Use these to control the CD player connected to the PMA-1500AE.

0~9,+10 : Number  
 REPEAT : Repeat play  
 RANDOM: Random play  
 ◀◀ : Auto search (to beginning of track)  
 ▶▶ : Auto search (to beginning of track)  
 ▶ : Playback  
 || : Pause  
 ■ : Stop  
 DISC SKIP: Refer to the operating instructions of your DENON CD player.

**Tape deck block**

- Use these to control the tape deck connected to the PMA-1500AE.

◀◀ : Reverse  
 ▶▶ : Forward  
 ◀ : Play (Reverse)  
 ▶ : Play (Forward)  
 A/B : A/B deck select  
 REC : Record  
 || : Pause  
 ■ : Stop

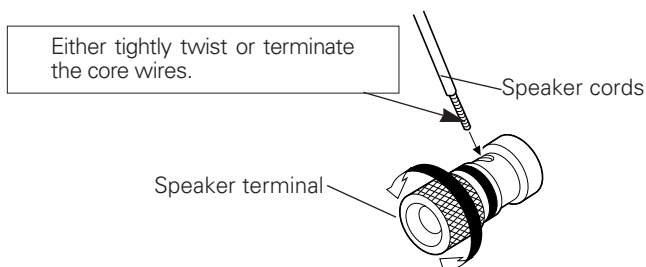
# Connections

## NOTE:

- Do not plug in the power supply cord until all connections are completed.
- Be sure to connect the left and right channels properly.
- Insert the plugs securely. Incomplete connections can result in noise.
- Note that placing the pin plug cords next to power supply cords or near power transformers may result in humming or other noise.
- The PHONO input terminals have an extremely high sensitivity, so avoid turning up the volume when no pin plug cords are connected. Doing so may result in induction humming (booming) from the speakers. When pin plug cords are not connected, insert the included short-circuit pin plug.

## Connecting the speakers

- Speaker impedance
  - When using speaker systems A and B separately, speakers with an impedance of 4 to 16  $\Omega$ /ohms can be connected.
  - When biwiring with biwireable speaker system, speakers with an impedance of 4 to 16  $\Omega$ /ohms can be connected.
  - Note that when using two sets of speaker systems together (A + B), use speakers with impedance 8 to 16  $\Omega$ /ohms, using speakers with an impedance other than between 8 to 16  $\Omega$ /ohms may cause damages.  
Note that this unit is not equipped with a switch for selecting the speaker system. The A and B speaker output terminals are connected in parallel.
- The protective circuit may be activated if speakers with other impedances are connected.
- Be sure to connect the cords between the speaker terminals and speaker systems with the same polarities ( $\oplus$  to  $\oplus$ ,  $\ominus$  to  $\ominus$ ). If not, the central sound will be weak and the position of the different instruments will not be clear, diminishing the stereo effect.
- When connecting the speakers, be sure that the core wires of the speaker cords do not stick out from the terminals and touch other terminals, each other or the rear panel.
- Connecting the speaker cords
  - ① Peel off the sheathing from the end of the cord.
  - ② Twist the core wires.
  - ③ Turn the speaker terminal counterclockwise to loosen it.
  - ④ Insert the core wires entirely, then turn the terminal clockwise to tighten it.



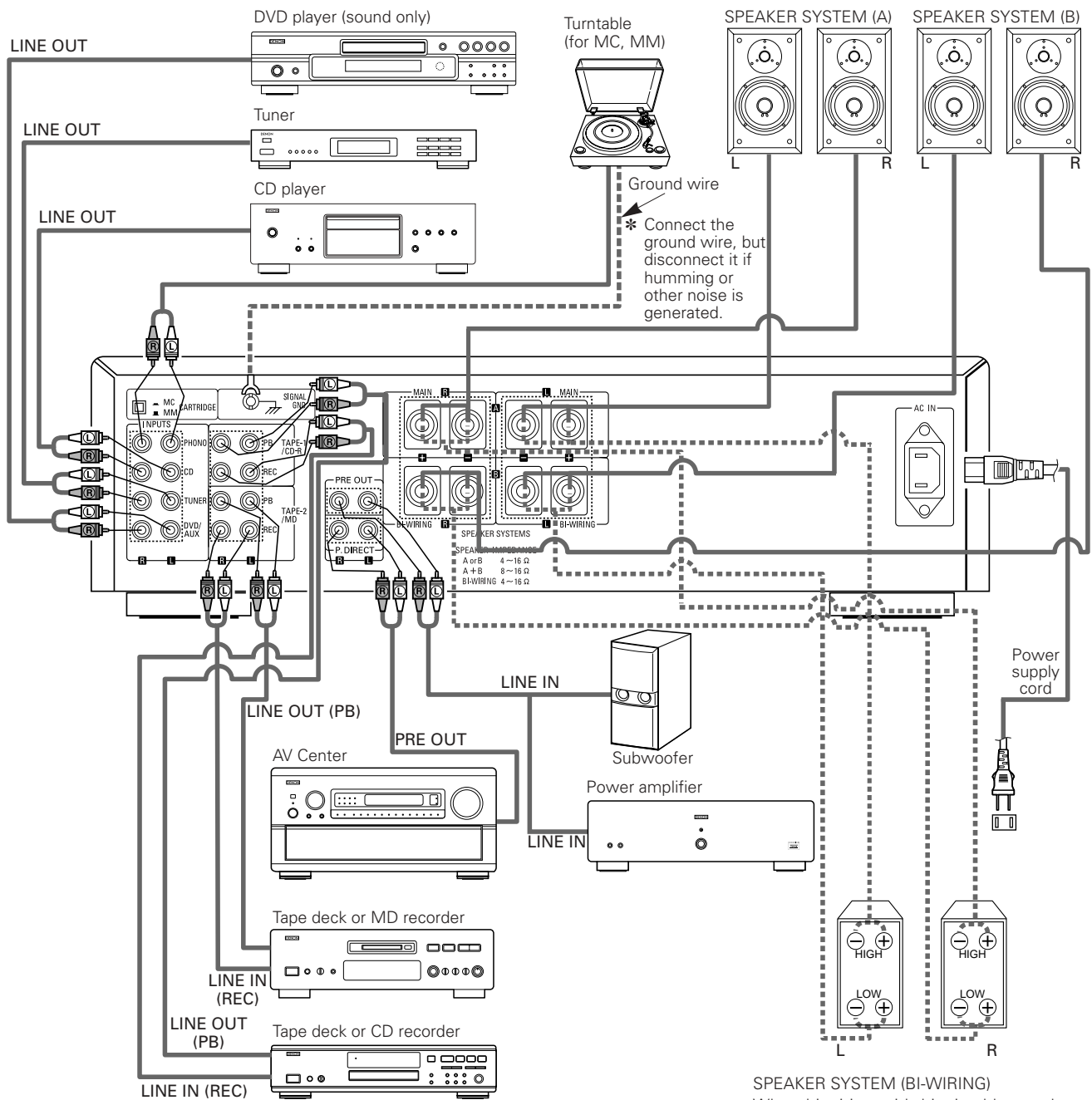
## Protective Circuit

This set is equipped with a high speed protective circuit. This circuit protects the internal circuitry from damage due to large currents flowing when the speaker jacks are not completely connected or when an output is generated by a short circuit. This protective circuit's operation cuts off the output to the speakers. In such a case, be sure to turn the power off and check the connections to the speakers. Then turn the power on again. After muting for several seconds, the set will operate normally.

## NOTE:

Never touch the speaker terminals when the power is on. Doing so could result in electric shocks.

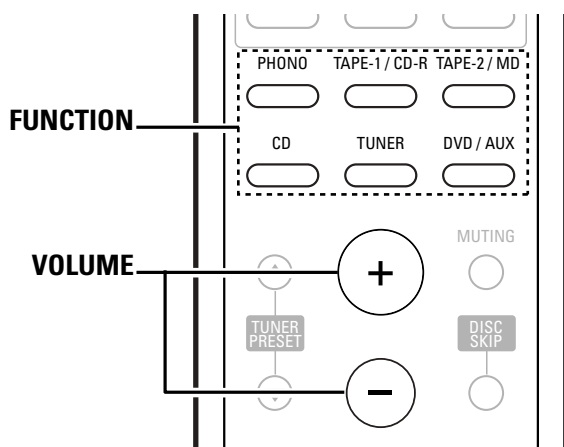
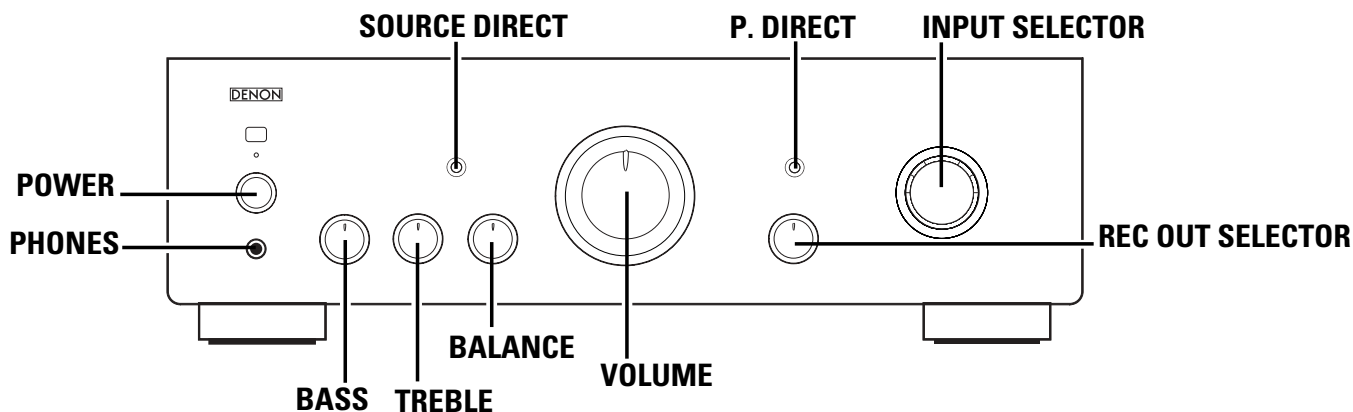
Connecting other sources



Ground wire  
\* Connect the ground wire, but disconnect it if humming or other noise is generated.

**SPEAKER SYSTEM (BI-WIRING)**  
When bi-wiring with bi-wireable speakers, connect the mid and high range terminals to SYSTEM (A) (or SYSTEM (B)), the low range terminals to SYSTEM (B) (or SYSTEM (A)).

# Operation



## Preparation

### ■ Checking connections

- Make sure that all the connections are proper by referring to the rear panel.
- Check the polarity (positive and negative) of connections, and the directivity of stereo separation (right cord to right channel terminal, and left cord to left channel terminal).
- Check the directivity of pin cord connection.

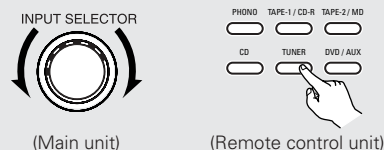
### ■ Setting of each knob

- Turn the **VOLUME** control knob counterclockwise, to minimum position.
- Set the **BASS**, **TREBLE** and **BALANCE** control knob, to center position.
- Set the **SOURCE DIRECT** and **P. DIRECT** switches to "OFF (■)".

After checking the above items, turn on the power, the amplifier is set in the ready mode in a few seconds.

## Playing the input source

### 1 Select the input source to be played.



- ※ When "PHONO" is selected, press the **CARTRIDGE** switch on the rear panel of the main unit to select "MC (■)" or "MM (■)".

### 2 Start playback on the selected component.

- ※ For operating instructions, refer to the component's manual.

### 3 Turn the **VOLUME**, **BASS**, **TREBLE** and **BALANCE** control knob to yield an appropriate volume and sound quality.

#### NOTE:

If **P. DIRECT** button is set to ON position, the **P. DIRECT** terminals are selected, and the input indicator is dimmed out.

## Recording

- 1 Set the **REC OUT SELECTOR** knob to the program source you wish to record.
- 2 Play back the program source.
- 3 Start recording.



### MEMO

- In the PMA-1500AE, the recording output signal and the speaker (headphone) signal are output via separate circuits so that knobs and switches related to the tone and volume have no effect what ever on the sound that is recorded. Also, since the recording function is selected by the **REC OUT SELECTOR** switch , the free program source can be played through the speakers (or headphones) even during recording.

### ■ Monitoring the recording

A recording in progress can be monitored if a tape deck with three individual heads for recording and playback is used. A tape deck in which a common head is used for both recording and playback cannot be used to monitor recording. When a recording is being made using TAPE-1/CD-R, selecting TAPE-1/CD-R with the **INPUT SELECTOR** knob will engage the RECORDING MONITOR and permit a check of the recording condition.

### ■ Copy from one tape to another

To copy from TAPE-1/CD-R to TAPE-2/MD, set the **REC OUT SELECTOR** knob to "TAPE-1 ▶ 2".

To copy from TAPE-2/MD to TAPE-1/CD-R, set the **REC OUT SELECTOR** knob to "TAPE-2 ▶ 1".

#### NOTE:

- This amplifier has a full memory back-up system. When the power is turned on, **INPUT SELECTOR** knob are set to the last mode set before the power was turned off.

# Troubleshooting

**Check the following before assuming there is a problem with the set.**

1. Are all connections proper ?
2. Is the set being operated as described in the operating instructions ?
3. Are the speakers and input components being operated properly ?

If the set does not seem to be operating properly, check the points listed below. If these points do not apply, the set may be damaged. Turn off the power immediately and contact your store of purchase.

	Symptom	Cause	Measures	Page
Common problems arising when listening to the CD, records, tapes, and FM broadcasts, etc.	Power indicator does not light and no sound is produced when POWER switch is turned on.	<ul style="list-style-type: none"> <li>• Power supply cord is not connected.</li> </ul>	<ul style="list-style-type: none"> <li>• Check that the cord is plugged in.</li> </ul>	8
	Power indicator lights but no sound is produced.	<ul style="list-style-type: none"> <li>• Speaker cords not properly connected.</li> <li>• INPUT SELECTOR knob or P. DIRECT switch is not set to proper position.</li> <li>• VOLUME control knob turned down.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect securely.</li> <li>• Set to the proper position.</li> </ul>	7
				<ul style="list-style-type: none"> <li>• Set to an appropriate level.</li> </ul>
	Sound is not produced from one side only.	<ul style="list-style-type: none"> <li>• Speaker cords not properly connected.</li> <li>• Input cords not are properly connected.</li> <li>• Left/right balance improperly adjusted.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect securely.</li> <li>• Connect securely.</li> <li>• Adjust the BALANCE control knob.</li> </ul>	8
				4
Volume level is different when listening to tuner and records.	<ul style="list-style-type: none"> <li>• Tuner or record output is different.</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust the tuner output to the turntable's output (if the tuner is equipped with an output control).</li> </ul>	–	
Positions of instruments inverted for stereo sources.	<ul style="list-style-type: none"> <li>• Left and right speakers or input cords the inverted.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the left/right connections.</li> </ul>	8	
Problems occurring when playing records.	Booming sound produced when playing records.	<ul style="list-style-type: none"> <li>• Turntable's ground wire is not connected.</li> <li>• Input cords are not properly connected to PHONO terminals.</li> <li>• Influence from a TV or VCR near the turntable.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect securely.</li> <li>• Connect securely.</li> <li>• Change the position of installation.</li> </ul>	8
				8
	Howling produced when volume is turned up while playing records.	<ul style="list-style-type: none"> <li>• Turntable and speaker systems are too close.</li> <li>• Floor is soft and vibrates easily.</li> </ul>	<ul style="list-style-type: none"> <li>• Move speaker systems as far away as possible.</li> <li>• Use cushions to absorb the vibrations transmitted from the floor to the speakers. If the turntable does not include insulators, use audio insulators, available in stores.</li> </ul>	–
–				
Sound is distorted.	<ul style="list-style-type: none"> <li>• Stylus pressure is too light.</li> <li>• Dirt on tip of stylus.</li> <li>• Defective cartridge.</li> </ul>	<ul style="list-style-type: none"> <li>• Apply proper pressure.</li> <li>• Check the tip of the stylus.</li> <li>• Replace the cartridge.</li> </ul>	–	
Remote control unit.	This unit is not operated properly when remote control unit is used.	<ul style="list-style-type: none"> <li>• Batteries are dead.</li> <li>• Remote control unit is too far from this unit.</li> <li>• Obstacle between this unit and remote control unit.</li> <li>• Different button is being pressed.</li> <li>• ⊕ and ⊖ ends of battery is inserted in reverse.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace with new batteries.</li> <li>• Move closer.</li> <li>• Remove obstacle.</li> <li>• Press the proper button.</li> <li>• Insert batteries properly.</li> </ul>	3
				3
				3
				6
				3



# Specifications

## ■ POWER AMPLIFIER SECTION

### Rated Output Power:

Both channel driven  
 (8  $\Omega$ /ohms Load) 70 W + 70 W  
 20 Hz to 20 kHz, T.H.D. 0.07 %  
 (4  $\Omega$ /ohms Load) 140 W + 140 W  
 DIN, 1 kHz, T.H.D. 0.7 %

### Total Harmonic Distortion: 0.01 %

(-3 dB at rated output, 8  $\Omega$ /ohms) (1 kHz)

### Input Sensitivity/Input Impedance:

P. DIRECT: 0.84 V/47 k $\Omega$ /kohms  
 Amplification factor: 29 dB

## ■ PRE AMPLIFIER SECTION

### PHONO EQUALIZER

#### Rated Output: 150 mV

(Recout Terminal)

#### Input Sensitivity/Input Impedance:

The value in parentheses ( ) refers to the input impedance when SOURCE DIRECT is ON.

PHONO: MM: 2.5 mV/47 k $\Omega$ /kohms  
 MC: 200  $\mu$ V/100  $\Omega$ /ohms

CD, TUNER, DVD/AUX, 125 mV/47 k $\Omega$ /kohms  
 TAPE-1/CD-R, (125 mV/12 k $\Omega$ /kohms)  
 TAPE-2/MD

#### RIAA Deviation:

PHONO: 20 Hz ~ 20 kHz  $\pm$ 0.5 dB

#### Maximum Input: PHONO

MM: 130 mV/1 kHz

MC: 10 mV/1 kHz

**Rated Output:** PRE OUT: 0.84 V  
 (Input CD 125 mV)

## ■ OVERALL CHARACTERISTICS

### SN Ratio (IHF A Network): PHONO

(input terminals short-circuited) MM: 89 dB  
 (at 5 mV input)

(input terminals short-circuited) MC: 74 dB  
 (at 0.5 mV input)

SOURCE-DIRECT: ON CD, TUNER,  
 DVD/AUX  
 TAPE-1/CD-R, TAPE-2/MD:  
 108 dB

### Tone Control Adjustable Range:

BASS: 100 Hz  $\pm$ 8 dB

TREBLE: 10 kHz  $\pm$ 8 dB

## ■ OTHERS

**Power Supply:** AC 230 V, 50 Hz

**Power Consumption:** 305W (IEC)

**Dimensions:** 434 (W) x 134 (H) x 410 (D) mm  
 (17-3/22" x 5-9/32" x 16-9/64")

**Net Mass:** 14.6 Kg (32 lbs 3.0 oz)

## ■ REMOTE CONTROL UNIT (RC-1022)

**Remote control system:** Infrared pulse system

**Power supply:** 3 V DC, Two size R03 (AAA) dry cell batteries

**External dimensions:** 49 (W) x 220 (H) x 21 (D) mm  
 (1-15/16" x 8-43/64" x 53/64")

**Mass:** 120 g (Approx. 4.2 oz)  
 (including batteries)

\* Maximum dimensions include controls, jacks, and covers.

(W) = width, (H) = height, (D) = depth

• For improvement purposes, specifications and functions are subject to change without advanced notice.

**DENON**

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