

DENON

POWER AMPLIFIER

POA-A1HD

Owner's Manual

Bedienungsanleitung

Manuel de l'Utilisateur

Manuale delle istruzioni

Manual del usuario

Gebruiksaanwijzing

Bruksanvisning

☐ SAFETY PRECAUTIONS



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.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

• **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 2006/95/EC and 2004/108/EC 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 2006/95/EC und 2004/108/EC.

• **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 2006/95/EC et 2004/108/EC.

• **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 2006/95/EC e 2004/108/EC. QUESTO PRODOTTO E' CONFORME AL D.M. 28/08/95 N. 548

• **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 2006/95/EC y 2004/108/EC.

• **EENVORMIGHEIDSVERKLARING**

Wij verklaren uitsluitend op onze verantwoordelijkheid dat dit produkt, 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 2006/95/EC en 2004/108/EC.

• **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 2006/95/EC och 2004/108/EC.

DENON Europe
Division of D&M Germany GmbH
An der Landwehr 19, Nettetal,
D-41334 Germany

CAUTION:

To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet. The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.

VORSICHT:

Um dieses Gerät vollständig von der Stromversorgung abzutrennen, ziehen Sie bitte den Stecker aus der Wandsteckdose. Der Netzstecker wird verwendet, um die Stromversorgung zum Gerät völlig zu unterbrechen; er muss für den Benutzer gut und einfach zu erreichen sein.

PRECAUTION:

Pour déconnecter complètement ce produit du courant secteur, débranchez la prise de la prise murale. La prise secteur est utilisée pour couper complètement l'alimentation de l'appareil et l'utilisateur doit pouvoir y accéder facilement.

ATTENZIONE:

Per scollegare completamente questo prodotto dalla rete di alimentazione elettrica, scollegare la spina dalla relativa presa a muro. La spina di rete viene utilizzata per interrompere completamente l'alimentazione all'unità e deve essere facilmente accessibile all'utente.

PRECAUCIÓN:

Para desconectar completamente este producto de la alimentación eléctrica, desconecte el enchufe del enchufe de la pared. El enchufe de la alimentación eléctrica se utiliza para interrumpir por completo el suministro de alimentación eléctrica a la unidad y debe de encontrarse en un lugar al que el usuario tenga fácil acceso.

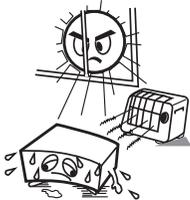
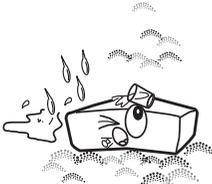
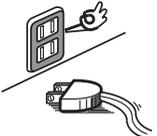
WAARSCHUWING:

Om de voeding van dit product volledig te onderbreken moet de stekker uit het stopcontact worden getrokken. De netstekker wordt gebruikt om de stroomtoevoer naar het toestel volledig te onderbreken en moet voor de gebruiker gemakkelijk bereikbaar zijn.

FÖRSIKTIHETSMÅTT:

Koppla loss stickproppen från eluttaget för att helt skilja produkten från nätet. Stickproppen används för att helt bryta strömförsörjningen till apparaten, och den måste vara lättillgänglig för användaren.

NOTE ON USE / HINWEISE ZUM GEBRAUCH / OBSERVATIONS RELATIVES A L'UTILISATION / NOTE SULL'USO / NOTAS SOBRE EL USO / ALVORENSTE GEBRUIKEN / OBSERVERA ANGÅENDE ANVÄNDNINGEN

 <ul style="list-style-type: none"> • Avoid high temperatures. Allow for sufficient heat dispersion when installed in a rack. • Vermeiden Sie hohe Temperaturen. Beachten Sie, dass eine ausreichende Belüftung gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird. • Eviter des températures élevées. Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère. • Evitate di esporre l'unità a temperature elevate. Assicuratevi che vi sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio. • Evite altas temperaturas. Permite la suficiente dispersión del calor cuando está instalado en la consola. • Vermijd hoge temperaturen. Zorg er bij installatie in een audiorack voor, dat de door het toestel geproduceerde warmte goed kan worden afgevoerd. • Undvik höga temperaturer. Se till att det finns möjlighet till god värmeavledning vid monteringen i ett rack. 	 <ul style="list-style-type: none"> • Keep the unit free from moisture, water, and dust. • Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern. • Protéger l'appareil contre l'humidité, l'eau et la poussière. • Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere. • Mantenga el equipo libre de humedad, agua y polvo. • Laat geen vochtigheid, water of stof in het apparaat binnendringen. • Utsätt inte apparaten för fukt, vatten och damm. 	 <ul style="list-style-type: none"> • Do not let foreign objects into the unit. • Lassen Sie keine fremden Gegenstände in das Gerät kommen. • Ne pas laisser des objets étrangers dans l'appareil. • Non inserite corpi estranei all'interno dell'unità. • No deje objetos extraños dentro del equipo. • Laat geen vreemde voorwerpen in dit apparaat vallen. • Se till att främmande föremål inte tränger in i apparaten. 	<p>CAUTION:</p> <ul style="list-style-type: none"> • 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 unit. • Observe and follow local regulations regarding battery disposal. • Do not expose the unit to dripping or splashing fluids. • Do not place objects filled with liquids, such as vases, on the unit. <p>ACHTUNG:</p> <ul style="list-style-type: none"> • 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 direkte Feuerquellen wie beispielsweise angezündete Kerzen aufgestellt werden. • Bitte beachten Sie bei der Entsorgung der Batterien die örtlich geltenden Umweltbestimmungen. • Das Gerät sollte keiner tropfenden oder spritzenden Flüssigkeit ausgesetzt werden. • Auf dem Gerät sollten keine mit Flüssigkeit gefüllten Behälter wie beispielsweise Vasen aufgestellt werden.
 <ul style="list-style-type: none"> • Handle the power cord carefully. Hold the plug when unplugging the cord. • Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen. • Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon. • Maneggiare il cavo di alimentazione con attenzione. Tenete ferma la spina quando scollegate il cavo dalla presa. • Maneje el cordón de energía con cuidado. Sostenga el enchufe cuando desconecte el cordón de energía. • Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld. • Hantera nätkablen varsamt. Håll i kablarna när den kopplas från el-uttaget. 	 <ul style="list-style-type: none"> • Unplug the power cord when not using the unit for long periods of time. • Wenn das Gerät längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker. • Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes. • Scollegate il cavo di alimentazione quando prevedete di non utilizzare l'unità per un lungo periodo di tempo. • Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo. • Neem altijd het netsnoer uit het stopcontact wanneer het apparaat gedurende een lange periode niet wordt gebruikt. • Koppla loss nätkablen om apparaten inte kommer att användas i lång tid. 	 <ul style="list-style-type: none"> • Do not let insecticides, benzene, and thinner come in contact with the unit. • Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen. • Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil. • Assicuratevi che l'unità non entri in contatto con insetticidi, benzolo o solventi. • No permita el contacto de insecticidas, gasolina y diluyentes con el equipo. • Voorkom dat insecticiden, benzeen of verfverdunder met dit toestel in contact komen. • Se till att inte insektsmedel på spraybruk, bensen och thinner kommer i kontakt med apparatens hölje. 	<p>ATTENTION:</p> <ul style="list-style-type: none"> • 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. • Veillez à respecter les lois en vigueur lorsque vous jetez les piles usagées. • L'appareil ne doit pas être exposé à l'eau ou à l'humidité. • Ne pas poser d'objet contenant du liquide, par exemple un vase, sur l'appareil. <p>ATTENZIONE:</p> <ul style="list-style-type: none"> • Le aperture di ventilazione non devono essere ostruite coprendole con oggetti, quali giornali, tovaglie, tende e così via. • Non posizionate sull'unità fiamme libere, come ad esempio candele accese. • Prestate attenzione agli aspetti legati alla tutela dell'ambiente nello smaltimento delle batterie. • L'apparecchiatura non deve essere esposta a gocciolii o spruzzi. • Non posizionate sull'unità alcun oggetto contenente liquidi, come ad esempio i vasi. <p>PRECAUCIÓN:</p> <ul style="list-style-type: none"> • La ventilación no debe quedar obstruida por haberse 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 exponer el aparato al goteo o salpicaduras cuando se utilice. • No colocar sobre el aparato objetos llenos de líquido, como jarras.
	 <p>* (For apparatuses with ventilation holes)</p> <ul style="list-style-type: none"> • Do not obstruct the ventilation holes. • Decken Sie den Lüftungsbereich nicht ab. • Ne pas obstruer les trous d'aération. • Non coprite i fori di ventilazione. • No obstruya los orificios de ventilación. • De ventilatieopeningen mogen niet worden geblokkeerd. • Täpp inte till ventilationsöppningarna. 	 <ul style="list-style-type: none"> • Never disassemble or modify the unit in any way. • Versuchen Sie niemals das Gerät auseinander zu nehmen oder zu verändern. • Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre. • Non smontate né modificate l'unità in alcun modo. • Nunca desarme o modifique el equipo de ninguna manera. • Dit toestel mag niet gedemonteerd of aangepast worden. • Ta inte isär apparaten och försök inte bygga om den. 	<p>WAARSCHUWING:</p> <ul style="list-style-type: none"> • De ventilatie mag niet worden belemmerd door de ventilatieopeningen af te decken met bijvoorbeeld kranten, een tafelkleed, gordijnen, enz. • Plaats geen open vlammen, bijvoorbeeld een brandende kaars, op het apparaat. • Houd u steeds aan de milieuvorschriften 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. <p>OBSERVERA:</p> <ul style="list-style-type: none"> • Ventilationen bör inte förhindras genom att täcka för ventilationsöppningarna med föremål såsom tidningar, bordsdukar, gardiner osv. • Inga blottade brandkällor, såsom tända ljus, får placeras på apparaten. • Tänk på miljöaspekterna när du bortskaffar batterier. • Apparaten får inte utsättas för vätska. • Placera inte föremål fyllda med vätska, t.ex. vasen, 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 the local recycling regulations.

When discarding the unit, comply with local rules or regulations.

Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal.

This product and the supplied accessories, excluding the batteries, constitute the applicable product according to the WEEE directive.

**HINWEIS ZUM RECYCLING:**

Das Verpackungsmaterial dieses Produktes ist zum Recyceln geeignet und kann wieder verwendet werden. Bitte entsorgen Sie alle Materialien entsprechend der örtlichen Recycling-Vorschriften.

Beachten Sie bei der Entsorgung des Gerätes die örtlichen Vorschriften und Bestimmungen.

Die Batterien dürfen nicht in den Hausmüll geworfen oder verbrannt werden; bitte entsorgen Sie die Batterien gemäß der örtlichen Vorschriften.

Dieses Produkt und das im Lieferumfang enthaltene Zubehör (mit Ausnahme der Batterien!) entsprechen der WEEE-Direktive.

UNE REMARQUE CONCERNANT LE RECYCLAGE:

Les matériaux d'emballage de ce produit sont recyclables et peuvent être réutilisés. Veuillez disposer des matériaux conformément aux lois sur le recyclage en vigueur.

Lorsque vous mettez cet appareil au rebut, respectez les lois ou réglementations en vigueur.

Les piles ne doivent jamais être jetées ou incinérées, mais mises au rebut conformément aux lois en vigueur sur la mise au rebut des piles.

Ce produit et les accessoires inclus, à l'exception des piles, sont des produits conformes à la directive DEEE.

NOTA RELATIVA AL RICICLAGGIO:

I materiali di imballaggio di questo prodotto sono riutilizzabili e riciclabili. Smaltire i materiali conformemente alle normative locali sul riciclaggio.

Per lo smaltimento dell'unità, osservare le normative o le leggi locali in vigore.

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

Questo prodotto e gli accessori inclusi nell'imballaggio sono applicabili alla direttiva RAEE, ad eccezione delle batterie.

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.

Este producto junto con los accesorios empaquetados es el producto aplicable a la directiva RAEE excepto pilas.

EEN AANTEKENING MET BETREKKING TOT DE RECYCLING:

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 bruigoed op.

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

Op dit product en de meegeleverde accessoires, m.u.v. de batterijen is de richtlijn voor afgedankte elektrische en elektronische apparaten (WEEE) van toepassing.

OBSERVERA ANGÅENDE ÅTERTVINNING:

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.

Denna apparat och de tillbehör som levereras med den uppfyller gällande WEEE-direktiv, med undantag av batterierna.

Contents

Getting Started

Accessories 1

Cautions on Handling 1

Cautions on Installation 2

Preparations 2

Part Names and Functions 3

 Front Panel 3

 Rear Panel 4

Connections and Settings

Preparations 5

 Cables Used for Connections 5

 Connecting the speaker cables 5

Settings 6

 Change the input mode 6

 Change the operation mode 6

 Change the control mode 6

Connect to AVP-A1HD 7

 Connecting to an RCA input terminal 7

 Connecting to an XLR input terminal 7

Connecting 2 POA-A1HD units to the AVP-A1HD 8

 Settings 8

Settings and Connections 9

 Normal Connections 9

 Bi-Amp Connections 10

 Bridge Connections 11

Connecting the External Controller 12

Connecting the Power Cord 12

Once Connections are Completed 12

Operations

Turning the Power On 13

Select the channel to display on the channel level meter 13

Set the channel level meter 13

Troubleshooting

..... 14

Specifications

..... 14

THX Ultra2™

Before any home theater component can be THX Ultra2 certified, it must incorporate all the features above and also pass a rigorous series of quality and performance tests. Only then can a product feature the THX Ultra2 logo, which is your guarantee that the Home Theater products you purchase will give you superb performance for many years to come. THX Ultra2 requirements cover every aspect of the product including power amplifier performance, pre-amplifier performance and operation, as well as hundreds of other parameters in both the digital and analog domain.

In addition to improvements to the power amplifier with respect to previous THX Ultra standards, three surround modes have been added: the THX Ultra2 Cinema mode, THX Music Mode and THX Games Mode.

- ※ “THX” and “Ultra2” are trademarks of THX Ltd. THX may be registered in some jurisdictions. All rights reserved.
- ※ In the NORMAL connection and Bi-AMP connection operation mode, POA-A1HD has acquired THX certification. To play back data in a manner that complies with the THX standard, use the NORMAL connection or Bi-AMP connection mode.

Getting Started

Thank you for purchasing this DENON product. To ensure proper operation, please read this owner’s manual carefully before using the product. After reading them, be sure to keep them for future reference.

Accessories

Check that the following parts are supplied with the product.

- ① Owner’s manual 1
- ② Service station list 1
- ③ Power cord (Cord length: Approx. 1.5 m) 1
- ④ Control link cable (Cord length: Approx. 3 m) 1

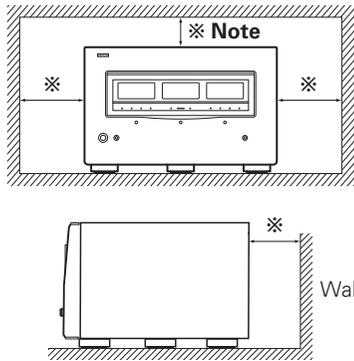


Cautions on Handling

- **Before turning the power switch on**
Check once again that all connections are correct and that there are no problems with the connection cables.
- Power is supplied to some of the circuitry even when the unit is set to the standby mode. When traveling or leaving home for long periods of time, be sure to unplug the power cord from the power outlet.
- **About condensation**
If there is a major difference in temperature between the inside of the unit and the surroundings, condensation (dew) may form on the operating parts inside the unit, causing the unit not to operate properly.
If this happens, let the unit sit for an hour or two with the power turned off and wait until there is little difference in temperature before using the unit.
- **Cautions on using mobile phones**
Using a mobile phone near this unit may result in noise. If so, move the mobile phone away from this unit when it is in use.
- **Moving the unit**
Turn off the power and unplug the power cord from the power outlet.
Next, disconnect the connection cables to other system units before moving the unit.
- Note that the illustrations in these instructions may differ from the actual unit for explanation purposes.

Cautions on Installation

Note:
For proper heat dispersal, do not install this unit in a confined space, such as a bookcase or similar enclosure.

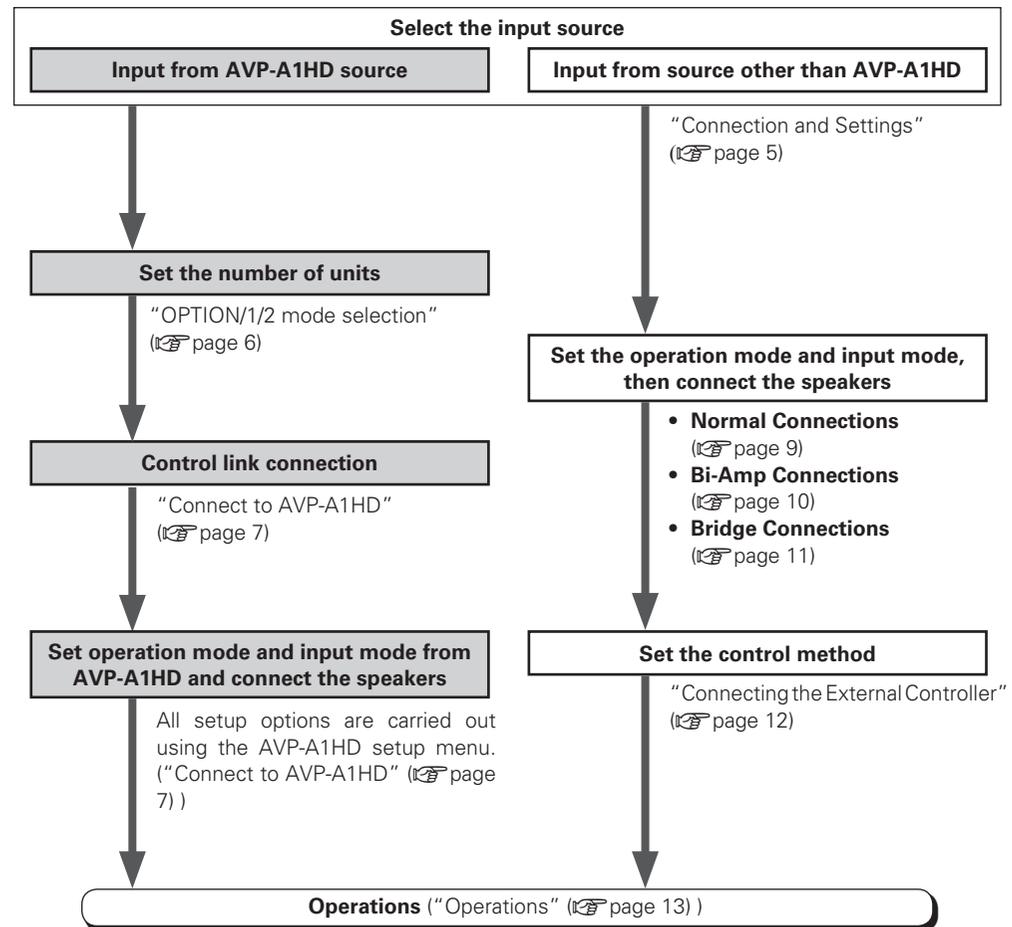


NOTE

- Since this unit is very heavy, when installing it on a rack etc, the maximum load capacity of the rack should always be checked first. Please refer to the user manual for the rack for the maximum load capacity.
- Always have at least two people work together to move the POA-A1HD.

Preparations

Before using this unit, the following steps should be followed, according to the situation in which the unit will be used.

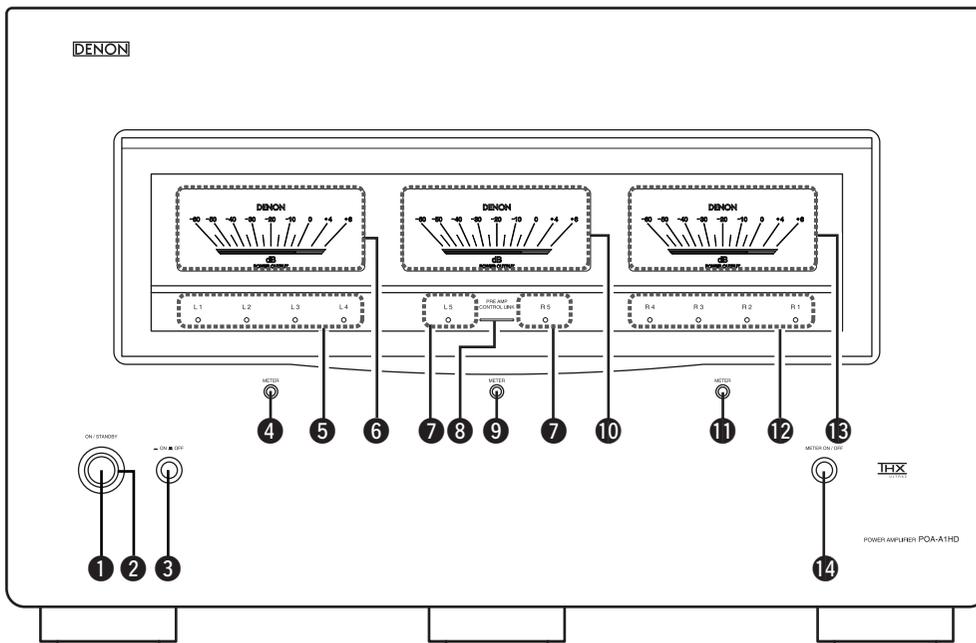


Getting Started
Connections and Settings
Operations
Troubleshooting

Part Names and Functions

For buttons not explained here, see the page indicated in parentheses ().

Front Panel



- ① Power operation button (ON/STANDBY) (13)
- ② Power indicator (13)
- ③ Power switch (ON OFF) (13)
- ④ Left channel meter select button (METER) (13)
- ⑤ Left channel meter indicators (L1 / L2 / L3 / L4) (13)
- ⑥ Left channel level meter (13)
- ⑦ Center channel meter indicators (L5 / R5) (13)
- ⑧ PRE AMP CONTROL LINK indicator (6)
- ⑨ Center channel meter select button (METER) (13)
- ⑩ Center channel level meter (13)
- ⑪ Right channel meter select button (METER) (13)
- ⑫ Right channel meter indicators (R1 / R2 / R3 / R4) (13)
- ⑬ Right channel level meter (13)
- ⑭ METER ON/OFF button (13)

□ About channel level meter

You can select the output level (dB indicator) of each power amp channel to check the meter.

If a sine wave is input, the output power for the meter indicator is as shown in the following table.

- When NORMAL connection or Bi-AMP connection is used

Output indicator	4 Ω/ohms load	6 Ω/ohms load	8 Ω/ohms load
0 (dB)	300 (W)	200 (W)	150 (W)
-10 (dB)	30 (W)	20 (W)	15 (W)
-20 (dB)	3 (W)	2 (W)	1.5 (W)
-30 (dB)	300 (mW)	200 (mW)	150 (mW)
-40 (dB)	30 (mW)	20 (mW)	15 (mW)
-50 (dB)	3 (mW)	2 (mW)	1.5 (mW)

- When BRIDGE connection is used

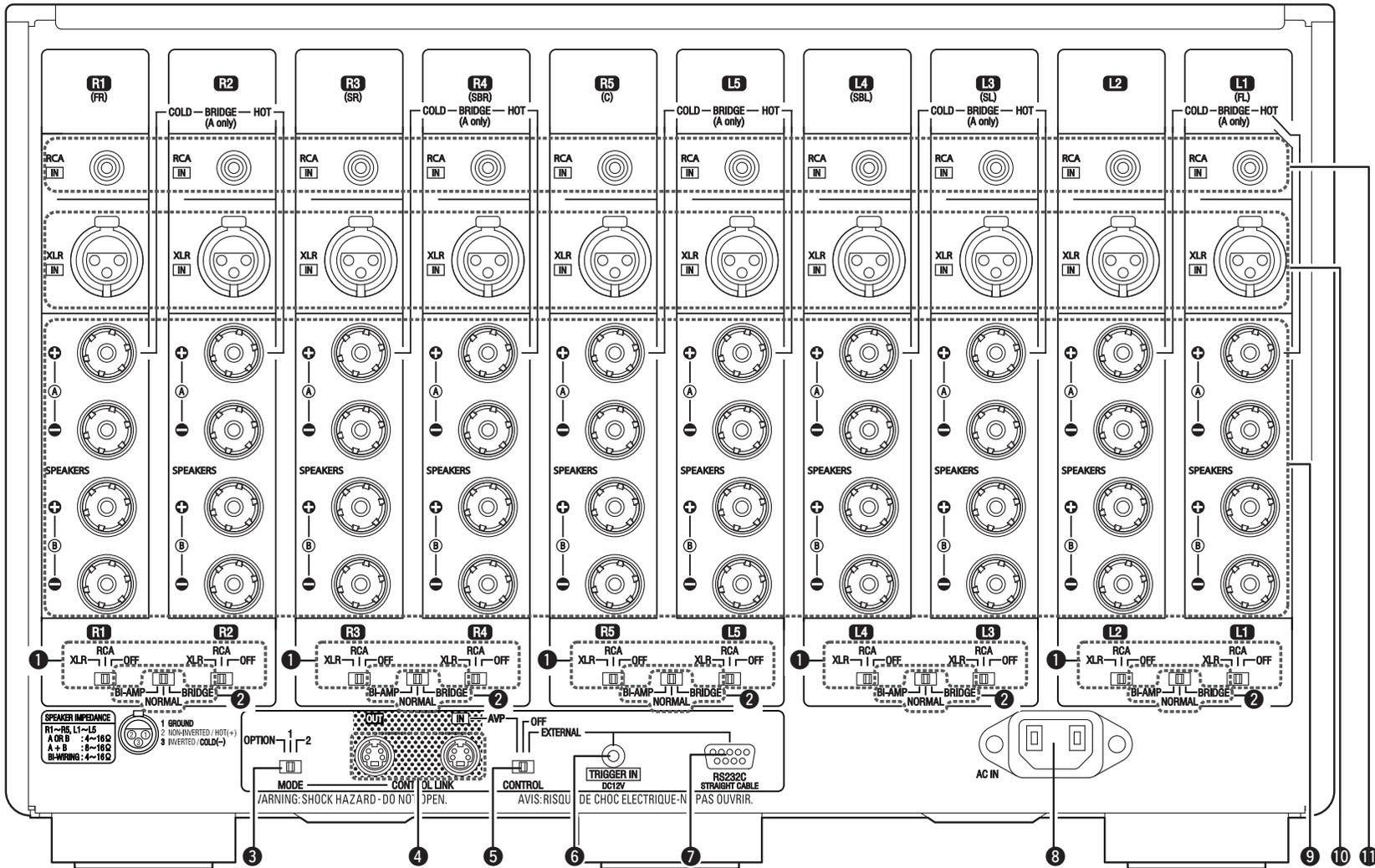
Output indicator	4 Ω/ohms load	6 Ω/ohms load	8 Ω/ohms load
0 (dB)	1200 (W) ※	800 (W) ※	600 (W) ※
-10 (dB)	120 (W)	80 (W)	60 (W)
-20 (dB)	12 (W)	8 (W)	6 (W)
-30 (dB)	1200 (mW)	800 (mW)	600 (mW)
-40 (dB)	120 (mW)	80 (mW)	60 (mW)
-50 (dB)	12 (mW)	8 (mW)	6 (mW)

※ Possible output by POA-A1HD is up to the rated output.

NOTE

When outputting a program source that has data such as SACD, which is higher than the audible band, the indicator moves differently than the volume you hear.

Rear Panel



- ❶ Input select switches (6)
- ❷ Operation mode select switch (6)
- ❸ Mode select switch (MODE) (6)
- ❹ CONTROL LINK connectors (7, 8)
- ❺ Control select switch (CONTROL) (6)
- ❻ TRIGGER IN jack (12)
- ❼ RS-232C connector (12)
- ❽ AC inlet (AC IN) (12)
- ❾ Speaker terminals (SPEAKERS) (5, 7, 9 ~ 11)
- ❿ XLR input connectors (7, 9 ~ 11)
- ⓫ RCA input connectors (7, 9 ~ 11)

NOTE
 The ❶ ~ ❸ and ❺ must be set before turning the power on. Settings which are changed after powering on will not be registered. In such cases, the power should be switched off and on again.

Connections and Settings

Connections for all compatible audio signal formats are described in these operating instructions. Please select the types of connections suited for the equipment you are connecting. With some types of connections, certain settings must be made on the POA-A1HD. For details, refer to the instructions for the respective connection items below.

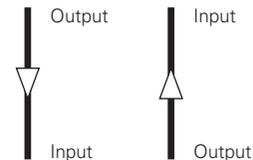
NOTE

- Do not plug in the power cord until all connections have been completed.
- When making connections, also refer to the operating instructions of the other components.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Do not bundle power cords together with connection cables. Doing so can result in humming or noise.

Preparations

Cables Used for Connections

Select the cables according to the equipment being connected.

Audio cables	Signal direction
<p>Analog connections (XLR)</p>  <p>Balanced cable</p>	<p>Audio signal:</p> 
<p>Analog connections (RCA)</p>  <p>Pin-plug cable</p>	
<p>Speaker connections</p>  <p>Speaker cables</p>	

Connecting the speaker cables

Carefully check the left (L) and right (R) channels and + (red) and – (black) polarities on the speakers being connected to the POA-A1HD, and be sure to interconnect the channels and polarities correctly.

1 Peel off about 10 mm of sheathing from the tip of the speaker cable, then either twist the core wire tightly or terminate it.



2 Turn the speaker terminal counterclockwise to loosen it.



3 Insert the speaker cable's core wire to the hilt into the speaker terminal.



4 Turn the speaker terminal clockwise to tighten it.



NOTE

- Connect the speaker cables in such a way that they do not stick out of the speaker terminals. The protection circuit may be activated if the core wires touch the rear panel or if the + and – sides touch each other (☞ Protection circuit).
- Never touch the speaker terminals while the power supply is connected. Doing so could result in electric shock.

Protection circuit

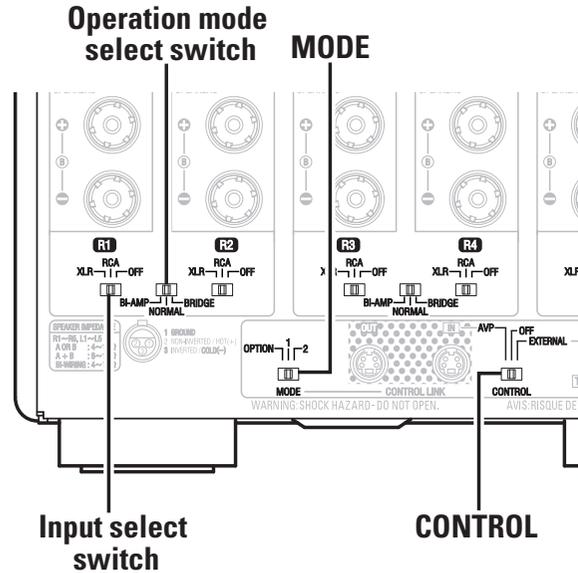
If speakers with an impedance lower than specified are used for an extended period of time with the volume turned up high, the temperature may rise, activating the protection circuit. When the protection circuit is activated, the speaker output is shut off and the power indicator flashes red. If this happens, unplug the power cord, then check the speaker cable and input cable connections. If the set is extremely hot, wait for it to cool off and improve ventilation around it. Once this is done, plug the power cord back in and turn the set's power back on. If the protection circuit is activated again even though there are no problems in the ventilation around the set nor in the connections, the set may be damaged. Turn the power off, then contact a DENON service center.

Settings

NOTE

The **MODE**, **CONTROL**, **Operation mode select switch** and **Input select switch** must be set before turning the power on. Settings which are changed after powering on will not be registered. In such cases, the power should be switched off and on again.

[Rear panel]



Change the input mode

Change the input mode for each channel (L1 ~ L5, R1 ~ R5).

Set the Input select switch.

- **XLR** : Use XLR terminal.
- **RCA** : Use RCA terminal.
- **OFF** : Channel is not used.

NOTE

- When the input and **Input select switch** setting on the unit are different, the unit does not operate.
- If **CONTROL** is set to "AVP", this setting is invalid.

Change the operation mode

Change the operation mode for each channel (L1 ~ L5, R1 ~ R5) or pair channel (L1 / L2, L3 / L4, L5 / R5, R1 / R2, R3 / R4).

Bi-AMP / NORMAL / BRIDGE mode selection

Set how to use the power amp with each channel.

Set the Operation mode select switch.

- **Bi-AMP** : Used for Bi-Amp connection.
- **NORMAL** : Used for NORMAL connection.
- **BRIDGE** : Used for BRIDGE connection.

NOTE

- Channels that have the input mode set to "OFF" can not be selected.
- If **CONTROL** is set to "AVP", this setting is invalid.

Change the control mode

Select the option suited for the equipment operating the unit.

Select CONTROL.

- **AVP** : Operates the unit from the AVP-A1HD (page 7).
- **OFF** : Control mode is not used.
- **EXTERNAL** : Operates the unit from equipment connected to the RS-232C connector or TRIGGER IN jack (page 12).



When **CONTROL** is set to "AVP", the PRE AMP CONTROL LINK indicator lights in blue.

OPTION / 1 / 2 mode selection

Use control link to connect POA-A1HD and AVP-A1HD and switch POA-A1HD according to the number of units to be connected.

Select MODE.

- **OPTION** : For future use, if the range of functions is expanded.
- **1** : Used as the first unit when one POA-A1HD unit is used or two POA-A1HD units are connected.
- **2** : Used as the second unit when two POA-A1HD units are connected.

Connect to AVP-A1HD

This example shows the connection of an AV sound preamplifier AVP-A1HD (sold separately) to the unit.

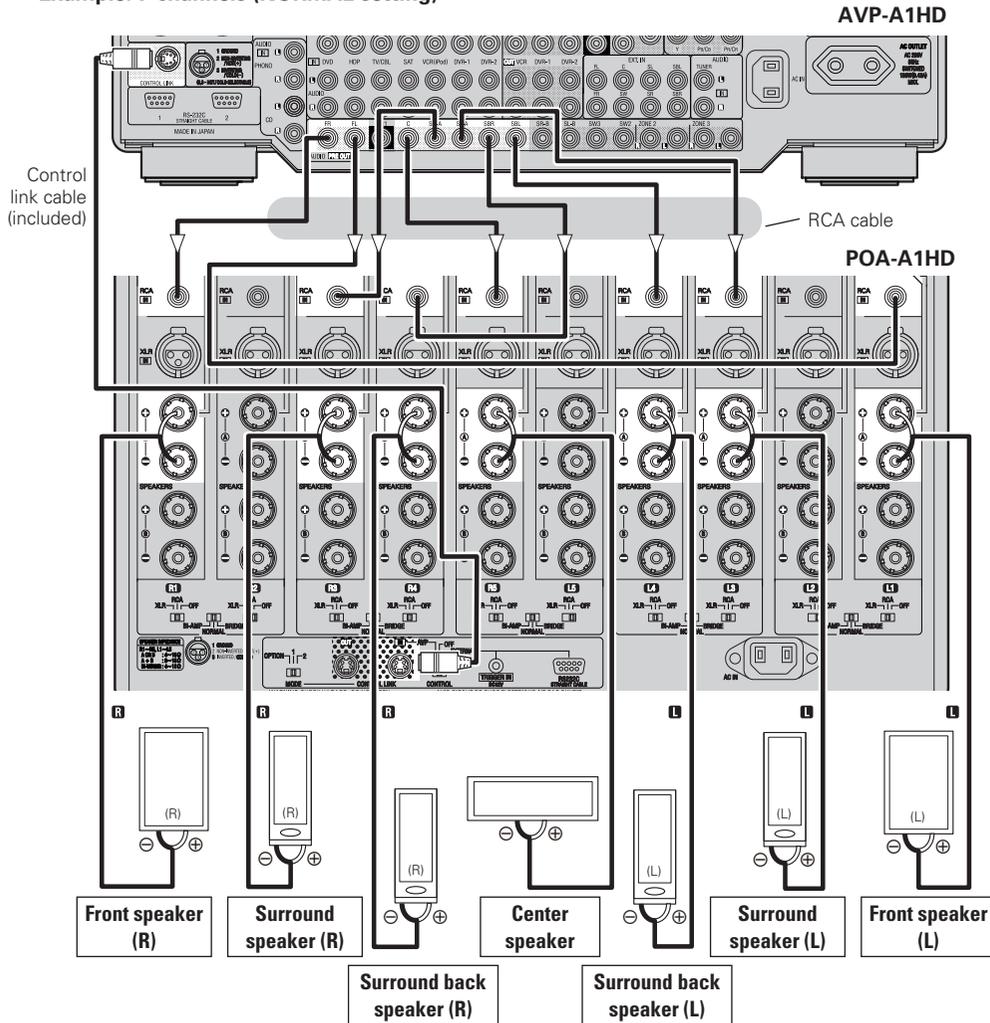
To operate POA-A1HD from AVP-A1HD, connect the control link cable, set **CONTROL** switch to "AVP" and then set **MODE** switch to "1".

- Please refer to the AVP-A1HD owner's manual for setup and operation instructions.
- When connecting, please also refer to the AVP-A1HD owner's manual.

NOTE Always set the **Input select switch** for channels not in use to "OFF".

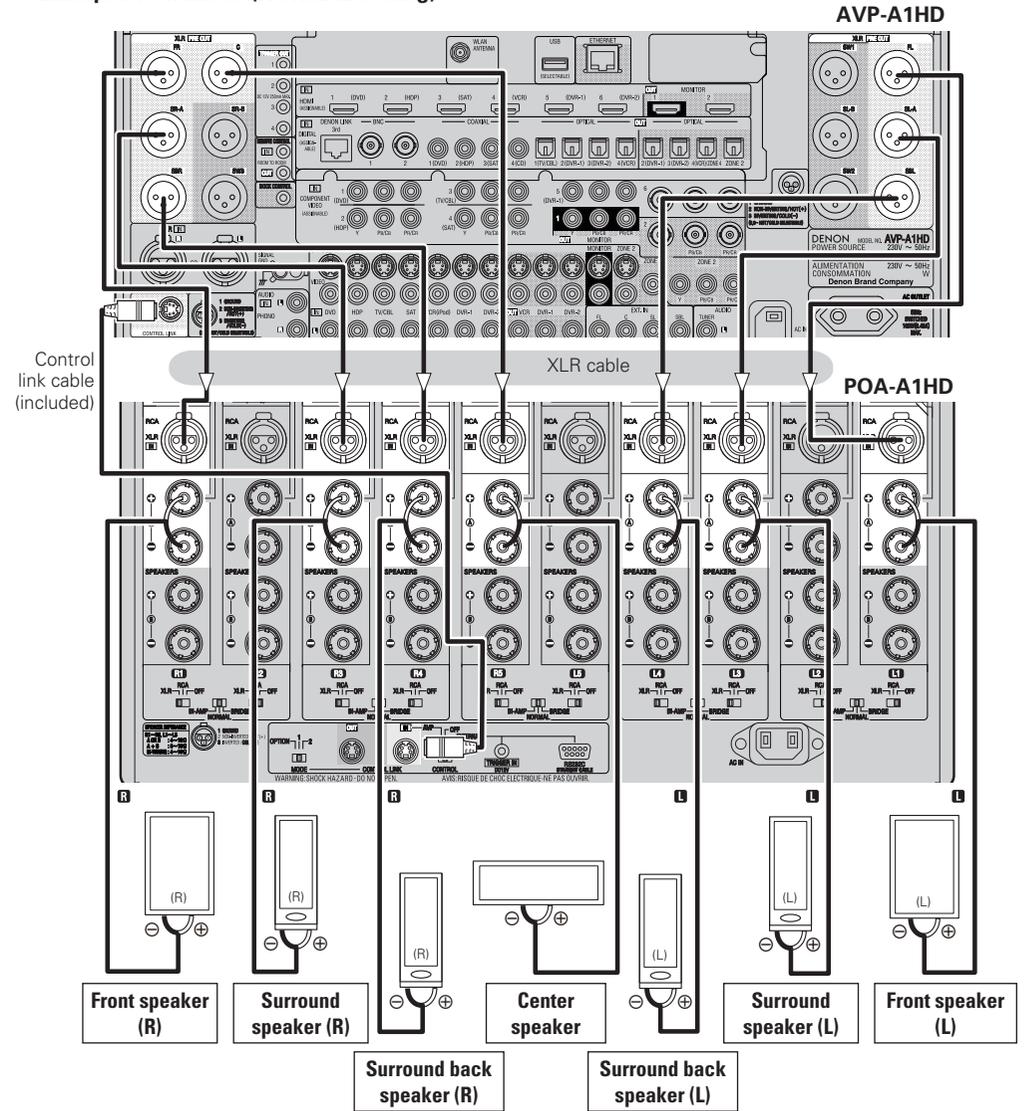
Connecting to an RCA input terminal

Example: 7-channels (NORMAL setting)



Connecting to an XLR input terminal

Example: 7-channels (NORMAL setting)



Connecting 2 POA-A1HD units to the AVP-A1HD

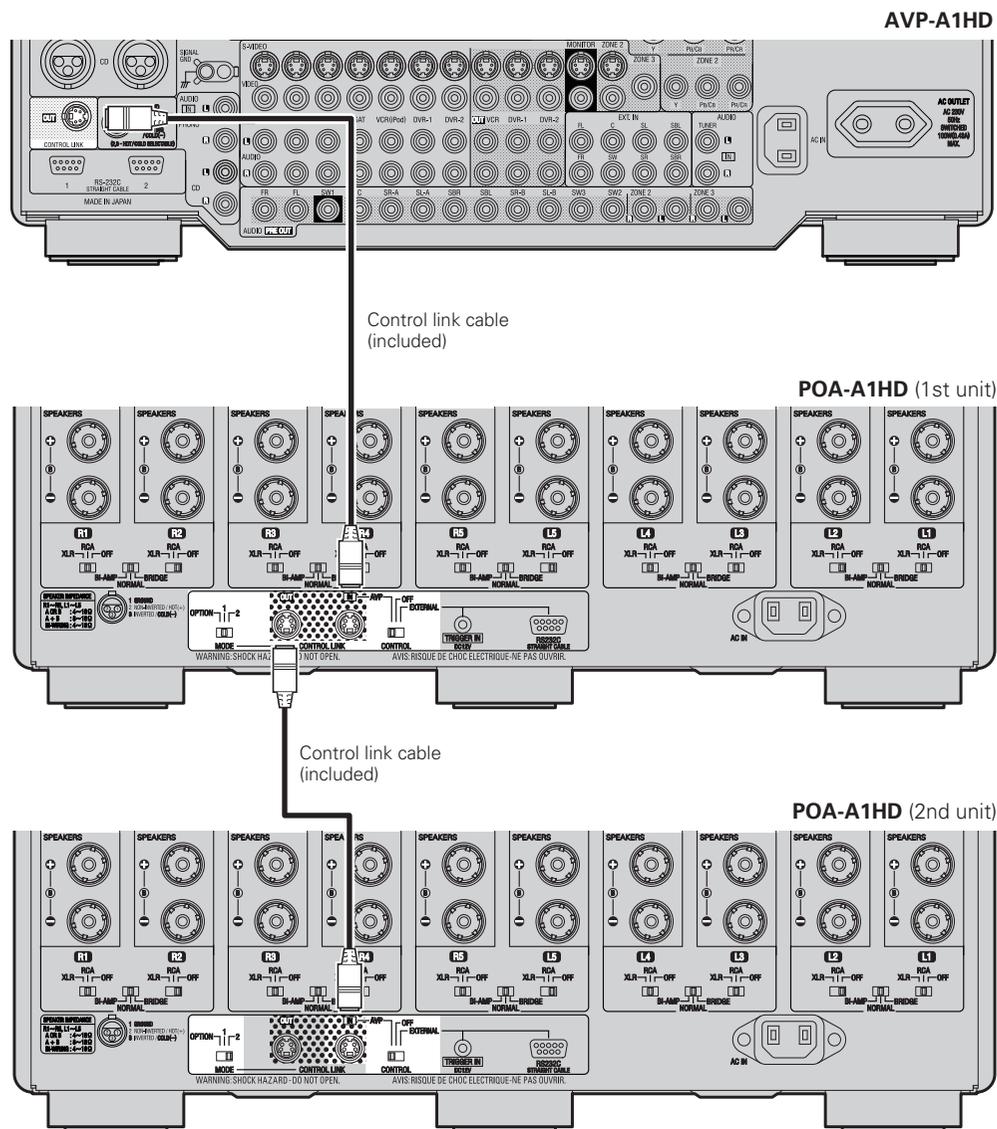
The AVP-A1HD can be operated when connected to 2 POA-A1HD units.

Settings

- 1 Connect the equipment using a control link cable.
- 2 Set **CONTROL** switch of two POA-A1HD units to “AVP” (☞ page 6).
- 3 Set **MODE** switch of POA-A1HD, which is connected to AVP-A1HD, to “1”, and the other **MODE** switch of POA-A1HD to “2” (☞ page 6).



Please refer to the AVP-A1HD owner's manual for setup and operation instructions.



Settings and Connections

Set the rear panel "Operation mode select switch" and "Input select switch" according to the connection method.

NOTE

The **Operation mode select switch** and **Input select switch** must be set before turning the power on. Settings which are changed after powering on will not be registered. In such cases, the power should be switched off and on again.

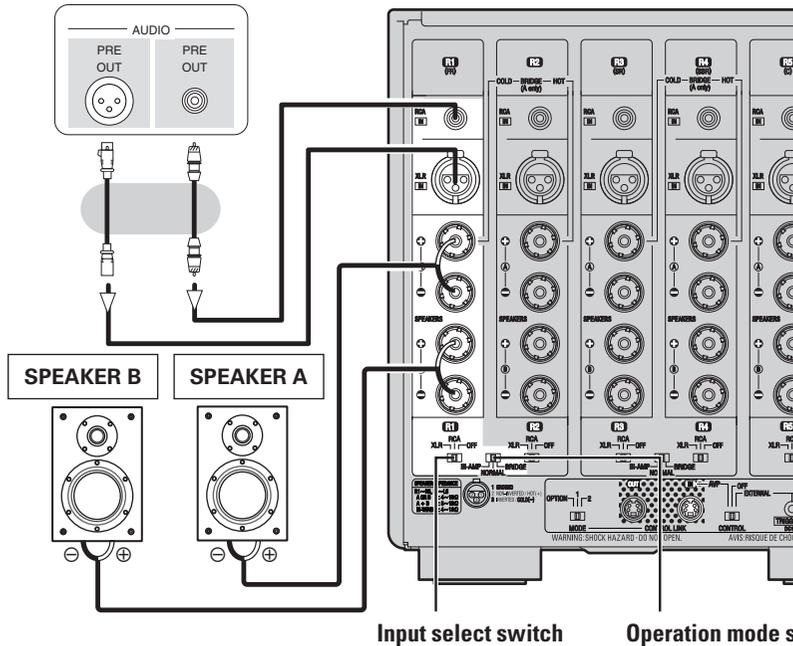
Normal Connections

Connection for signal input to each channel to be output from the channel's speaker terminal.

- Set each switch as shown below.
 - ① Set the **Operation mode select switch** to "NORMAL" (☞ page 6).
 - ② Set the **Input select switch** according to the input (☞ page 6).
 - For RCA input Set to "RCA".
 - For XLR input Set to "XLR".

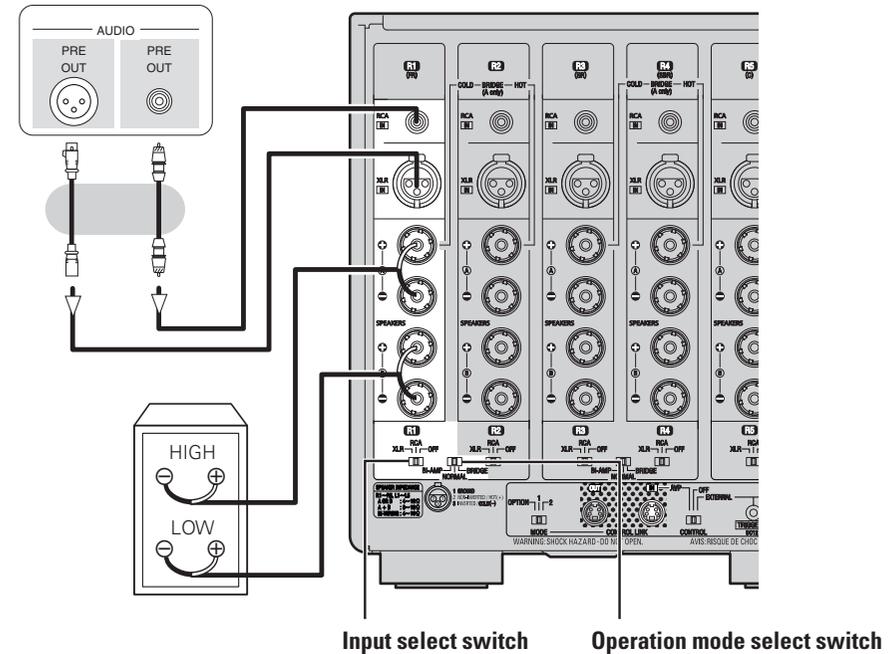
Example: Normal connection to the **R1** channel

※Setup each channel (**L1** ~ **L5**, **R1** ~ **R5**) using the same steps.



Bi-wiring connection

When using speakers that have input terminals for both woofer units and tweeter units, this connection allows for the same signal to be output from each unit. With this connection the interference between signals for the woofer unit and tweeter unit is low so that you can enjoy high quality sound in playback.



NOTE

When using Bi-Wiring connection use 4 ~ 16 Ω/ohms speakers for the impedance.

NOTE

- The same signal is output to speakers A and B.
- Please use the following speaker impedance.
 - When using only speaker A or B 4 ~ 16 Ω/ohms
 - When using speakers A and B at the same time 8 ~ 16 Ω/ohms

Bi-Amp Connections

When using speakers that have input terminals for both woofer units and tweeter units, this connection outputs one input signal from the two amps on the main unit to each of these units. With this connection the interference between signals for the woofer unit and tweeter unit is eliminated so that you can enjoy high quality sound in playback.

• Bi-Amp output is setup using the following combination of channels. The input terminals to be used are as follows.

- **R1** and **R2** input terminal : **R2** channels
- **R3** and **R4** input terminal : **R4** channels
- **R5** and **L5** input terminal : **L5** channels
- **L3** and **L4** input terminal : **L3** channels
- **L1** and **L2** input terminal : **L1** channels

• Set each switch as shown below.

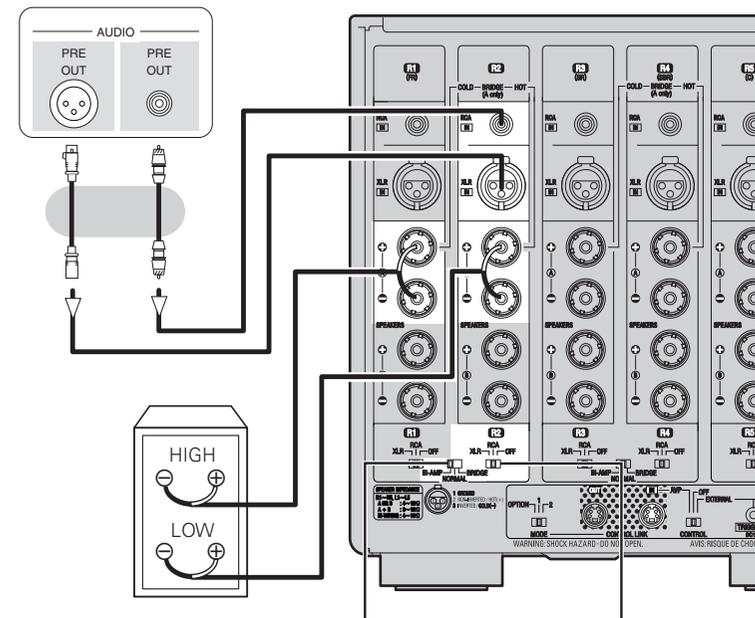
- ① Set the **Operation mode select switch** to "Bi-AMP" (☞ page 6).
- ② Set the **Input select switch** according to the input (☞ page 6).
 - For RCA input..... Set to "RCA".
 - For XLR input..... Set to "XLR".

NOTE

The input terminal (channel **R1** in case of **R1** and **R2**) that is not used for this setting becomes invalid regardless of the status of **Input select switch**.

Example: Bi-Amp connection using **R1** and **R2** channels

※ Setup each pair channel using the same steps.



Operation mode select switch Input select switch

NOTE

- The same signal is output to channel **R1** and channel **R2**.
- No signal is output from the speaker B terminal.
- Use speakers with an impedance of 4 ~ 16 Ω/ohms.

Bridge Connections

This connection is used to use two power amps to output opposite phase signals generated from one input signal using two power amp units.

By connecting the output (+ side) of the two power amps to the speaker, a larger output than in a normal connection is possible.

• Bridge output is setup using the following combination of channels. The input terminals to be used are as follows.

- **R1** and **R2** input terminal : **R2** channels
- **R3** and **R4** input terminal : **R4** channels
- **R5** and **L5** input terminal : **L5** channels
- **L3** and **L4** input terminal : **L3** channels
- **L1** and **L2** input terminal : **L1** channels

• Set each switch as shown below.

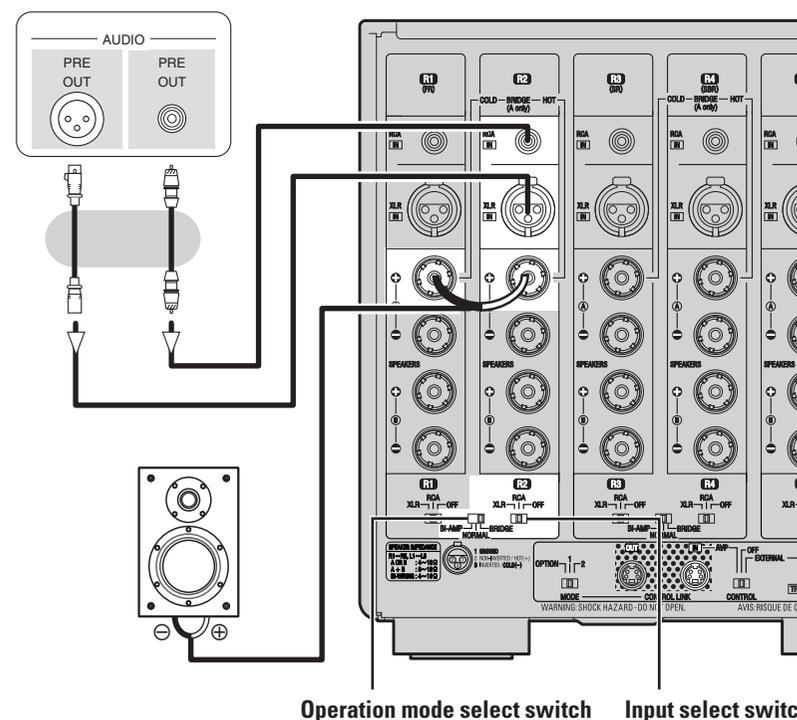
- ① Set the **Operation mode select switch** to "BRIDGE" (☞ page 6).
- ② Set the **Input select switch** according to the input (☞ page 6).
 - For RCA input..... Set to "RCA".
 - For XLR input..... Set to "XLR".

NOTE

- The input terminal (channel **R1** in case of **R1** and **R2**) that is not used for this setting becomes invalid regardless of the status of **Input select switch**.
- About output by this connection, the voltage applied to the speaker is 6 dB higher than the output when the normal connection is used. Adjust the input signal using the volume of the pre-amp when connecting.

Example: Bridge connection using **R1** and **R2** channels

※ Setup each pair channel using the same steps.

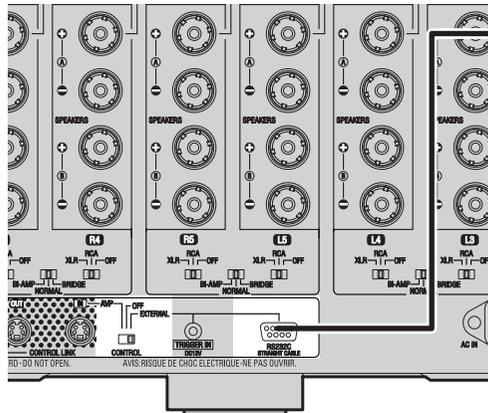


NOTE

- No signal is output from the "-" terminal of speaker A, or the speaker B terminal.
- Use speakers with an impedance of 4 ~ 16 Ω/ohms.
- Do not connect a speaker using other than the specified combination of channels.

Connecting the External Controller

When using the following functions, set the CONTROL switch to "EXTERNAL".

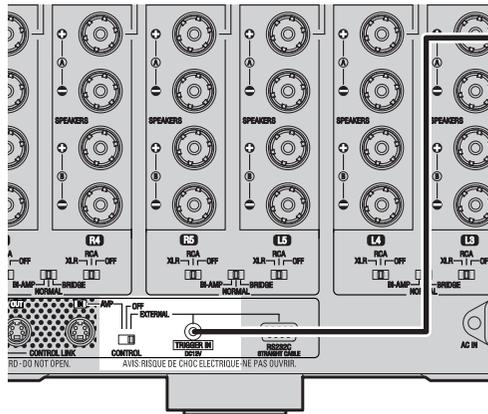


RS-232C connector

This connector is used for an external controller.

※ If you use an external controller to operate the unit via the RS-232C terminal, you must confirm the following beforehand.

- ① Turn on the POA-A1HD's power.
- ② Turn off the POA-A1HD's power from the external controller.
- ③ POA-A1HD enters the standby status.

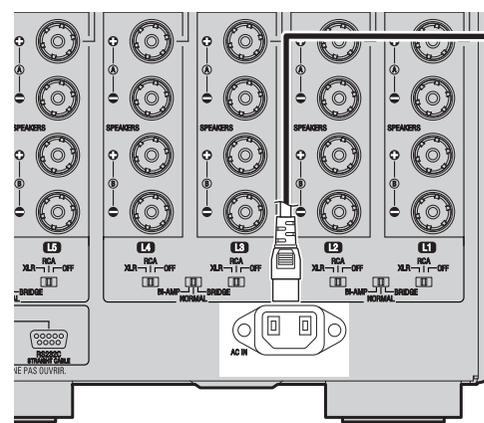


Trigger input jacks

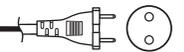
Connect to external equipment that has a trigger output terminal. When the equipment connected by this terminal is powered on / off, the power of the unit can be changed from on / standby.

Connecting the Power Cord

Wait until all connections have been completed before connecting the power cord.



Power cord (included)



To wall-mounted power outlet (AC 230 V, 50 Hz)

- ※ In order to fully demonstrate the ability of POA-A1HD, connect the unit to a larger current capacity outlet (at least 10 A is recommended). Also, be sure that the total power consumption of all devices connected to the outlet does not exceed the outlet capacity.

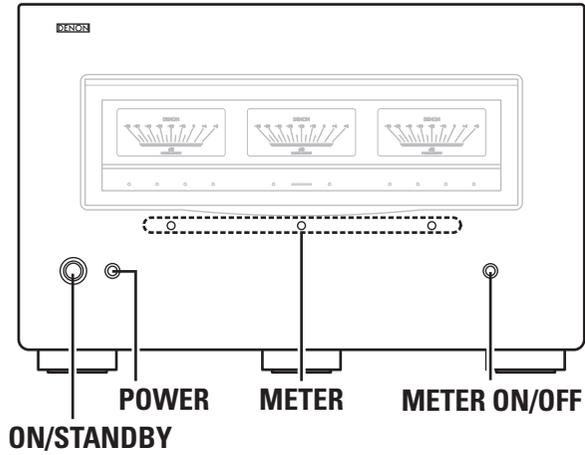
NOTE

- Insert the AC plugs securely. Incomplete connections could cause noise.
- The power plug must be connected to a wall-mounted power outlet.
- Do not connect the unit to an integrated AC outlet on another product or to extension cord.

Once Connections are Completed

Turning the Power On (page 13)

[Front panel]



Operations

Turning the Power On

- 1 Press POWER.**
The power indicator lights red and the power is set to the standby mode.
- 2 Press ON/STANDBY.**
The power indicator flashes in green for several seconds and the power is turned on.

NOTE

Before tuning on the power, lower the sound volume of the connected equipment.

Turning the Power Off

- ① Press **ON/STANDBY**.
The power is set to the standby mode.
- ② Press **POWER**.
The power indicator turns off, and so does the power.

NOTE

Power continues to be supplied to some of the circuitry even when the power is in the standby mode. When leaving home for long periods of time or when traveling, either press **POWER** to turn off the power, or unplug the power cord from the power outlet.

Select the channel to display on the channel level meter

Press METER.

The indicator of the selected channel meter turns green and the output level of the selected channel is indicated on the meter.

- **L channel meter select button :**



- **Center channel meter select button :**



- **R channel meter select button :**



- Channels for which **Input select switch** is set to "OFF" are skipped.
- In the case of bi-amp connection, the indicator of the input-side channel meter of the selected channel pair turns green.
- In the case of a bridge connection, the indicator of the channel meter of the selected channel pair turns green.

Set the channel level meter

Set ON/OFF of all channel level meters.

Press METER ON/OFF.

- **ON** : The channel level meter is illuminated and the channel level meter operates.
- **OFF** : The channel level meter illumination and the channel meter indicator turn off and the channel level meter does not operate.



The PRE AMP CONTROL LINK indicator goes off if set to "OFF" with the AVP-A1HD connected to the control link.

Troubleshooting

If a problem should arise, first check the following:

1. Are the connections correct?
2. Is the set being operated as described in the owner's manual?
3. Are the other components operating properly?

If this unit does not operate properly, check the items listed in the table below. Should the problem persist, there may be a malfunction.

In this case, disconnect the power immediately and contact your store of purchase.

Symptom	Cause	Countermeasure	Page
Power does not turn on, or turns off directly after it was turned on.	<ul style="list-style-type: none"> • Connection of the power cord is faulty. 	<ul style="list-style-type: none"> • Check that the power plugs are securely inserted into the POA-A1HD's AC inlets and the wall power outlet. 	12
No sound is produced from speakers.	<ul style="list-style-type: none"> • Connection with the input devices or connection of the speaker cables is faulty. 	<ul style="list-style-type: none"> • Check the connections. 	5, 9 ~ 11
Power turns off suddenly and power indicator flashes red.	<ul style="list-style-type: none"> • Protection circuit activated due to rise of internal temperature. 	<ul style="list-style-type: none"> • Turn off the power, wait for the set to fully cool down, then turn the power back on. 	5
		<ul style="list-style-type: none"> • Place the set in a well-ventilated place. 	5
	<ul style="list-style-type: none"> • Core wires of two speakers are touching each other or a core wire is sticking out of the terminal and touching the set's rear panel, activating the protection circuit. • Speakers with an impedance other than specified are being used. • Set is damaged. 	<ul style="list-style-type: none"> • First unplug the power cord, then twist the core wires tightly or terminate the speaker cables, then reconnect. 	5
		<ul style="list-style-type: none"> • Use speakers with the specified impedance. 	9 ~ 11
		<ul style="list-style-type: none"> • Turn off the power and contact a DENON service center. 	—

Specifications

Power amplifier section

Rated output:

Normal connections:

L1 / R1:

150 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
300 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

L2 / R2:

150 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
300 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

L3 / R3:

150 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
300 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

L4 / R4:

150 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
300 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

L5 / R5:

150 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
300 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

Bridge connections:

L1 + L2:

300 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
500 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

L3 + L4:

300 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
500 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

L5 + R5:

300 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
500 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

R1 + R2:

300 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
500 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

R3 + R4:

300 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.)
500 W (4 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

Frequency response:

Speaker output connectors:

10 Hz ~ 100 kHz (8 Ω/ohms, +1, -3 dB (at 1 W))

A or B 4 ~ 16 Ω/ohms

A + B 8 ~ 16 Ω/ohms

Bi-wiring 4 ~ 16 Ω/ohms

General

Power supply:

AC 230 V, 50 Hz

Power consumption:

1300 W

0.3 W (Standby)

Maximum external dimensions:

434 (W) x 281 (H) x 530 (D) mm

Weight:

60 kg

DENON

www.denon.com

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Printed in Japan 00D 511 4673 001