# **DENON**

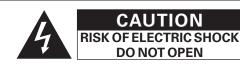
**MULTI CHANNEL POWER AMPLIFIER** 

# **POA-3012CI**

**Owner's Manual** 

Bedienungsanleitung

#### **□ SAFETY PRECAUTIONS**





#### **CAUTION:**

TO REDUCETHE 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.

#### **CAUTION:**

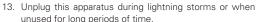
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the unit.
- Observe and follow local regulations regarding battery disposal.
- Do not expose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

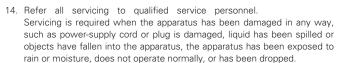
#### ACHTUNG:

- 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 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.

# IMPOTANT SAFETY INSTRUCTIONS

- Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings.
  - Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.





#### **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.

## **FCC INFORMATION (For US customers)**

#### 1. COMPLIANCE INFORMATION

Product Name: Multi Channel Power Amplifier

Model Number: POA-3012CI

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

Denon Electronics (USA), LLC (a D & M Holdings Company)

100 Corporate Drive Mahwah, NJ 07430-2041 Tel. (800) 497-8921

#### 2. IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by DENON may void your authority, granted by the FCC, to use the product.

#### 3. NOTE

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

#### □ NOTE ON USE / HINWEISE ZUM GEBRAUCH



- 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.



- 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
- Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.



- Keep the unit free from moisture, water, and dust.
- Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.



Do not let foreign objects into the unit.
 Lassen Sie keine fremden Gegenstände in das Gerät kommen.



- 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.



- 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.



- \* (For apparatuses with ventilation holes)
- Do not obstruct the ventilation holes.Decken Sie den Lüftungsbereich nicht ab.



- Never disassemble or modify the unit in any way.
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.

#### ☐ For Europe model

#### **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.

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

#### 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.

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# Troubleshooting.

# **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 manual1
2 Warranty (for North America model only)1
③ Service station list1
4 Power cord1
Cord length: Modelle für die Nordamerika:6.6 ft / 2.0 m 2 Europe model:

# **Cautions on Handling**

#### Before turning the ON/STANDBY 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.

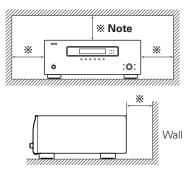
Next, disconnect the connection cables to other system units before moving the unit.

 Note that the illustrations in these instructions may differ from the actual unit for explanation purposes.

# **Cautions on Installation**

#### Note:

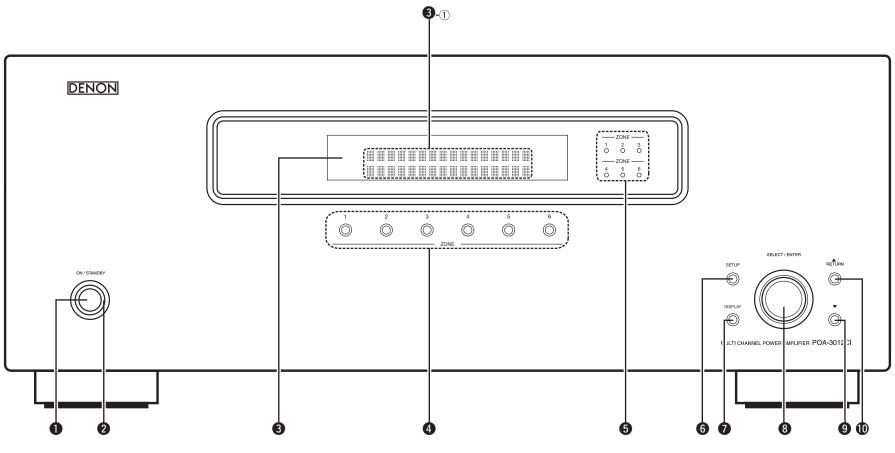
For proper heat dispersal, do not install this unit in a confined space, such as a bookcase or similar enclosure.



# **Part Names and Functions**

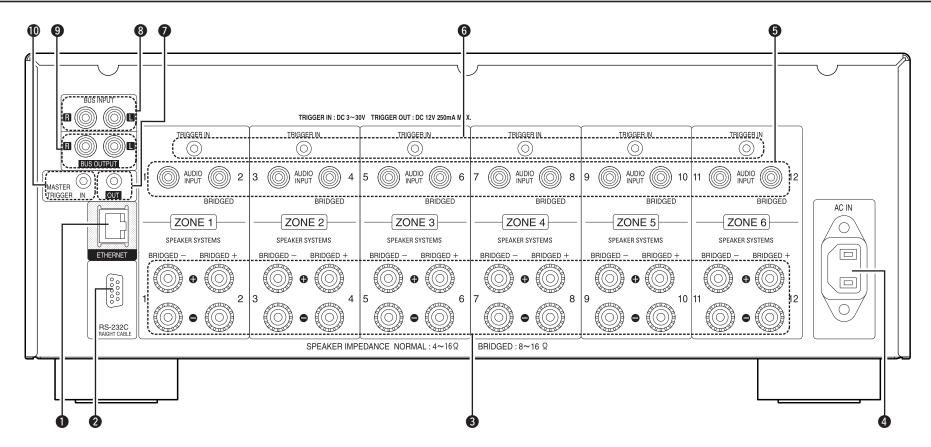
For buttons not explained here, see the page indicated in parentheses ( ).

# **Front Panel**



- 1 Power operation button (ON / STANDBY) ......(17) **2** Power indicator ...... (17) **3** Display ......(17)
- 1 Information display Displays present status information and Setup menu etc.,
- **4 ZONE select buttons** ......(10) **5 ZONE** operation mode indicators ...... (6, 13)
- **6** SETUP button ......(10) **7** DISPLAY button ......(17)
- **3** SELECT / ENTER knob ...... (10)
- **9 ▽ (Down) button** ......(10)

# **Rear Panel**



- ③ TRIGGER IN jacks
   (9)

   ② MASTERTRIGGER OUT jack
   (9)

   ③ BUS INPUT connectors
   (7)

   ④ BUS OUTPUT connectors
   (7)

   ⑩ MASTERTRIGGER IN jack
   (9)

# **Connections**

Connections for all compatible audio signal formats are described in this owner's manual. 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-3012Cl. 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
- When making connections, also refer to the operating instructions of the other components.
- In the case of Bus input / output connections, 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**

# **Before Connecting**

The POA-3012Cl incorporates six sets of 2-channel amplifier from ZONE1 to ZONE6.

The same audio signal can be output from all ZONE or separate signals can be output from each ZONE. The POA-3012Cl also supports BRIDGED output.

Before making the connections, determine the input signals and output signals for each ZONE and then set up the POA-3012Cl in accordance with the following procedure.

#### □ Input Setting

#### Select the input terminal to use.

Each Zone input connectors or BUS input connectors.

# Connect the external device to the input terminal.



# Set the input source.

"Input Connection" ( page 7)

# □ Output Setting

## Select the speaker output method.

NORMAL output or BRIDGED output.

# Connect the speaker cable.

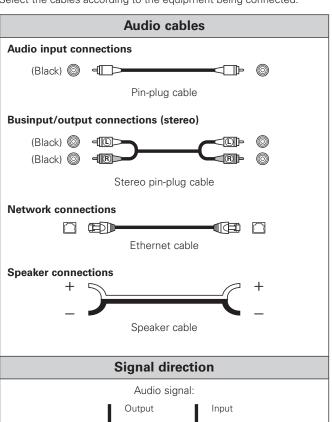
"Speaker Connections" (**©** page 5)

# Set the output channel.

"OPERATION MODE" (**P** page 13)

## **Cables Used for Connections**

Select the cables according to the equipment being connected.

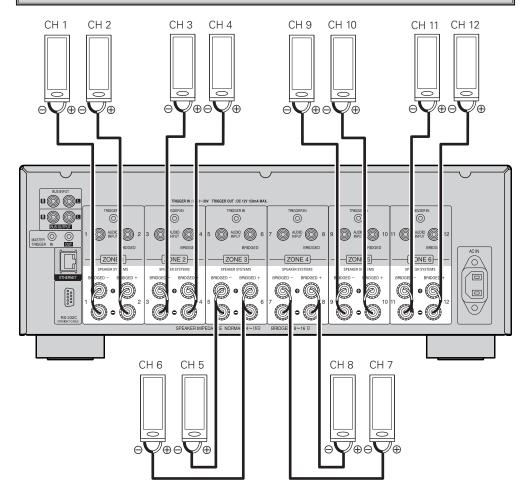


Input

Output

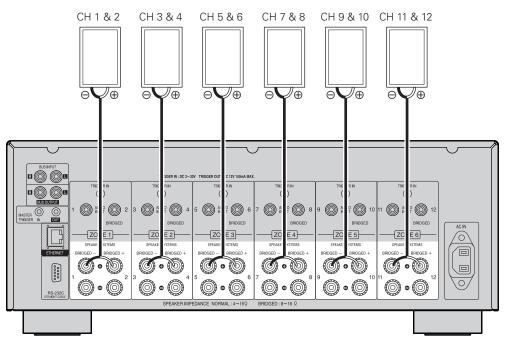
# **Speaker Connections**

# Connection Method When Outputting 2 Channels From One ZONE



# **Connection Method for BRIDGED Output**

- In BRIDGED mode, one channel is output from one ZONE.
- To set BRIDGED mode, select "BRIDGED" as the "OPERATION MODE" on the "Main Setup" menu.
- When BRIDGED out putting a signal input to the AUDIO INPUT terminal, input to an even-numbered input terminal.
- To select a signal for BRIDGED output from among the signals ("L", "R", "L+R") input to the BUS INPUT terminal, use "INPUT SELECT" on the "Main Setup" menu.



## **Connecting the Speaker Cables**

Carefully check the channel numbers and + (red) and - (black) polarities on the speakers being connected to the POA-3012CI, and be sure to interconnect the channels and polarities correctly.

Peel off about 0.03 ft/10 mm of sheathing from the tip of the speaker cable, then either twist the core wire tightly or terminate it.



terminal **↑** Turn the speaker counterclockwise to loosen it.



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



Turn the speaker terminal clockwise to tighten it.



#### When using a banana plug (for North America model)

Tighten the speaker terminal firmly before inserting the banana plug.



#### NOTE

- Use speakers with an impedance of 4 to 16  $\Omega$ /ohms. Use a 8 to 16  $\Omega$ /ohms speaker for BRIDGED output.
- 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 (for example 4  $\Omega$ / ohms speakers / NORMAL MODE) are used for an extended period of time with the volume turned up high, the temperature may rise, activating the protection circuit.

There are 2 kind of protection circuits in POA-3012CI.

- 1. Protection circuit for individual Amplifier (Zone 1 ~ 6) This protection circuit detects over load condition of the amplifier circuit.
- When the protection circuit is activiated, the speaker output of individual Amplifier (Zone 1 ~ 6) is shut off, and the Zone operation mode indicator for protected Zone No. flashes red.
- If this happen, unplug the power cord, then check the speaker cable and input cable connections.
- 2. Temperature rise protection circuit in the chassis. This protection circuit detects temperature rising in the chassis. When the protection circuit is activiated, the power source for all Amplifier circuits is shut off, and the power indicator flashes red. If this happen, it may be extremely hot in the chassis, unplug the power cord.

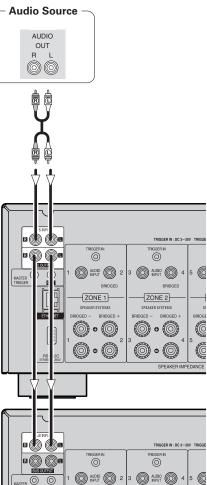
Wait for it too cool off and improve ventilation around it. Once this is done, plug the power cord back in and turn the set's power back on.

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.

# **Input Connections**

#### **BUS INPUT Connections**

- To play signals input to the BUS INPUT terminal, select the channel using "INPUT SELECT" on the "Main Setup" menu.
- When "BUS L+R" is used, signals input to BUS INPUT L and R are mixed and output as monaural.



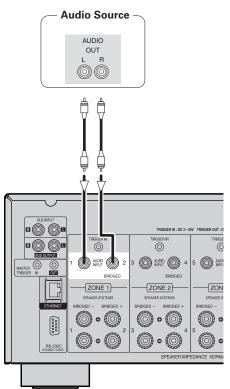
## **AUDIO INPUT Connections**

#### ☐ When Using in NORMAL MODE

To play signals input to the AUDIO INPUT terminal, use "INPUT SELECT" on the "Main Setup" menu to set each channel to AUX.

#### **Example**

Connect the left and right channels from audio source to audio inputs of arbitrary numbers.

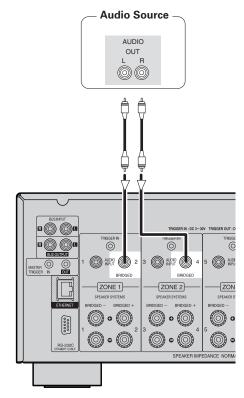


## ☐ When Using in BRIDGED MODE

Input BRIDGED output signals to an even-numbered input terminal.

#### [Example]

Connect the left and right channels from audio source to audio inputs of arbitrary numbers.

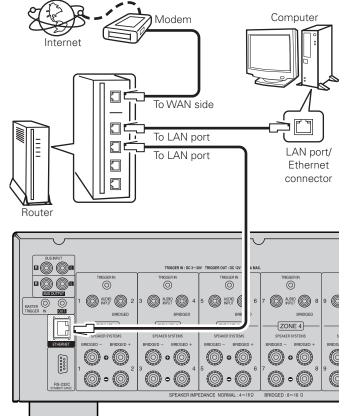




Signals input from the BUS INPUT are output from the BUS OUTPUT terminal. These signals can be output to the BUS INPUT terminal of another POA-3012Cl unit.

# **Connections to Other Devices**

#### **ETHERNET Connections**



#### **Required System**

#### □ Broadband Internet Connection

A broadband line connection to the Internet is required in order to use the POA-3012CI's firmware update.

#### □ Modem

This is a device that is connected to the broadband line to communicate with the Internet. Some are integrated with the router.

#### □ Router

- When using the POA-3012Cl, we recommend you use a router equipped with the following functions:
- · Built-in DHCP (Dynamic Host Configuration Protocol) server This function automatically assigns IP addresses on the LAN.
- · Built-in 100 BASE-TX switch When connecting multiple devices, we recommend a switching hub with a speed of 100 Mbps or greater.

#### ☐ Ethernet Cable (CAT-5 or greater recommended)

- The POA-3012Cl does not come with an Ethernet cable.
- Some flat type Ethernet cables are easily affected by noise. We recommend using a normal type cable.
- If the sound is broken in an environment in which there is much power supply noise from electric products or in a noisy network environment, use a shielded type Ethernet cable (For North America model).
- For the Ethernet cable, used a shielded twisted pair (STP) cable. Do not use an unshielded twisted pair (UTP) cable, as it may exceed noise standard limits (For Europe model).

## □ Computer

A computer with the following specifications is required to use a server.

OS

Windows® XP Service Pack2 Windows Vista

- Internet browser
- Microsoft Internet Explorer 5.01 or later
- LAN port



For connections to the Internet, contact an ISP (Internet Service Provider) or a computer shop.

#### NOTE

- A contract with an ISP is required to connect to the Internet. No additional contract is needed if you already have a broadband connection to the Internet.
- The types of routers that can be used depend on the ISP. Contact an ISP or a computer shop for details.

#### □ Others

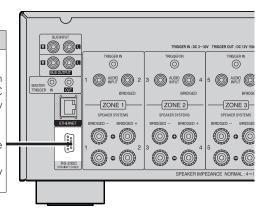
- If you have an Internet provider contract for a line on which network settings are made manually, make the settings at "Network Setup" (Pp page 15).
- With the POA-3012CI, it is possible to use the DHCP and Auto IP functions to make the network settings automatically.
- When using a broadband router (DHCP function), the POA-3012Cl sets the IP address, etc., automatically.
- When using the POA-3012Cl connected to a network with no DHCP function, make the settings for the IP address, etc., at "Network Setup" (Pr page 15).
- The POA-3012CI is not compatible with PPPoE. A PPPoE-compatible router is required if you have a contract for a line of the type with which the PPPoE is set.

## **External Controller**

#### **RS-232C connector**

This connector is used for an external controller.

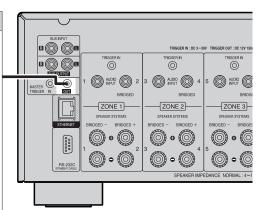
- \* If you wish to control the POA-3012CI from an external controller using the RS-232C connector, perform the operation below beforehand.
- 1) Turn the POA-3012CI's power.
- 2 Turn off the POA-3012CI's power from the external controller.
- 3 Check that the POA-3012Cl is in the standby mode.



#### Trigger output jack

The power of an external device equipped with a trigger input jack can be turned on and off in association with operations on the POA-3012CI.

- Output level: 250 mA / 12 V
- Check the trigger input conditions of the connected device.
- If the trigger input level of the connected device is higher than 250 mA / 12 V and depending on the short-circuiting conditions, the POA-3012CI's protection circuit may be activated, in which case "TRIGGER OUT OVER LOAD" appears on the display. If this happens, turn off the POA-3012Cl's power and disconnect the connected device.

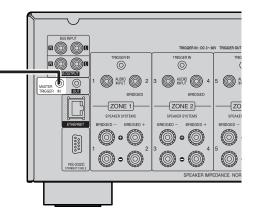


#### Master trigger input jack

The "POWER CONFIGURATION" setting is valid at the time of a "MASTERTRIGGER".

Voltage input to the MASTER TRIGGER input terminal and operating status of the POA-3012CI: At DC 3 ~ 30 V..... ON

At DC 0 V ..... STANDBY



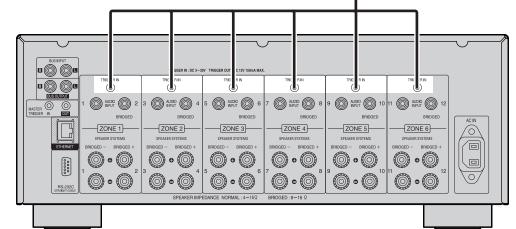
#### **ZONE** trigger input jack

The ZONE TRIGGER ON MODE setting is valid at the time of a "TRIGGER IN".

Voltage input to the TRIGGER IN input terminal and operating status of the power amplifier of each ZONE:

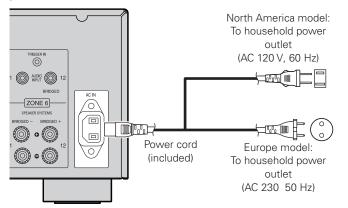
At DC 3 ~ 30 V.....ON

At DC 0 V ..... STANDBY



# **Connecting the Power Cord**

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



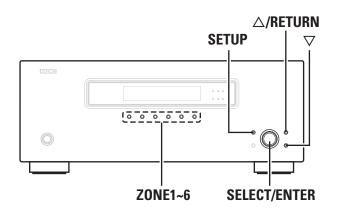
## NOTE

Insert the AC plugs securely. Incomplete connections could cause

# **Once Connections are** Completed

Turning the Power On (page 17)

# Setup



# **Example of Display of Default Values**

In lists of selectable items or adjustable ranges, the item surrounded by a border is the default value.



# **Operations**

For all settings, refer to "Menu map" ( page 11, 12). For details of individual settings refer to the explanations of settings (Pp page 13 ~ 16).

Press the **SETUP** button.

The POA-3012Cl enters the "SETUP" mode and the first level menu is displayed.

The selected item blinks.

Select the required item on the menu and set it.

# Using the menu

☐ To select the item to be set

Turn the SELECT / ENTER knob until the item you want to set appears.

- ☐ To enable lower level menu items to be displayed Press the **SELECT / ENTER** knob or the  $\nabla$  button.
- ☐ To return to higher level menu items Press the  $\triangle$  /RETURN button.
- ☐ To confirm selected item Press the **SELECT / ENTER** knob
- ☐ To exit SETUP mode

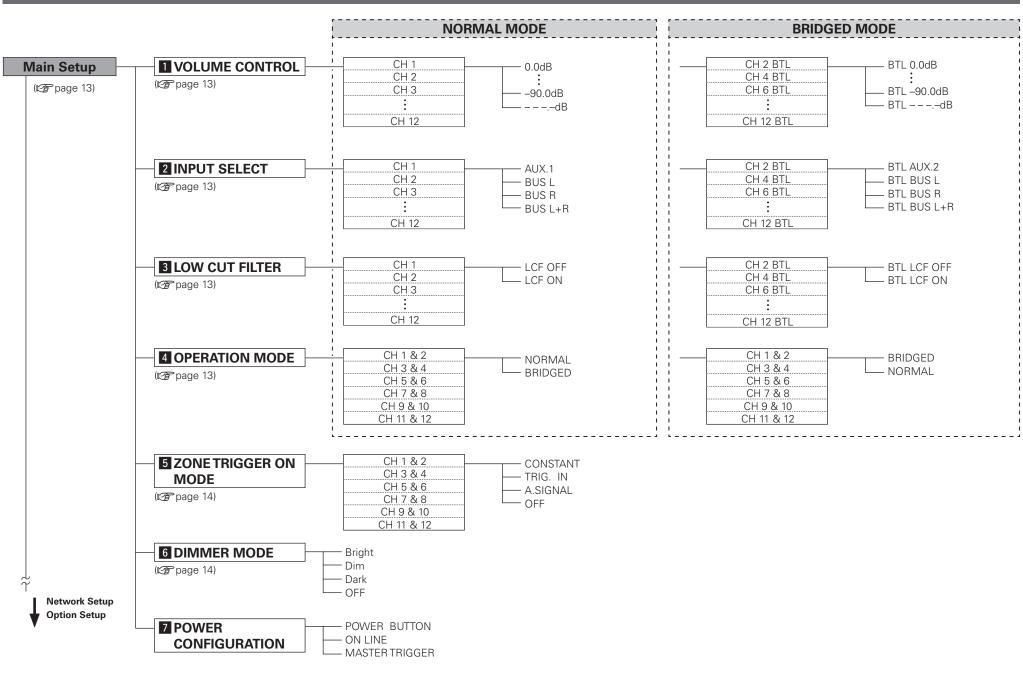
Press the **SETUP** button until the display returns to normal.

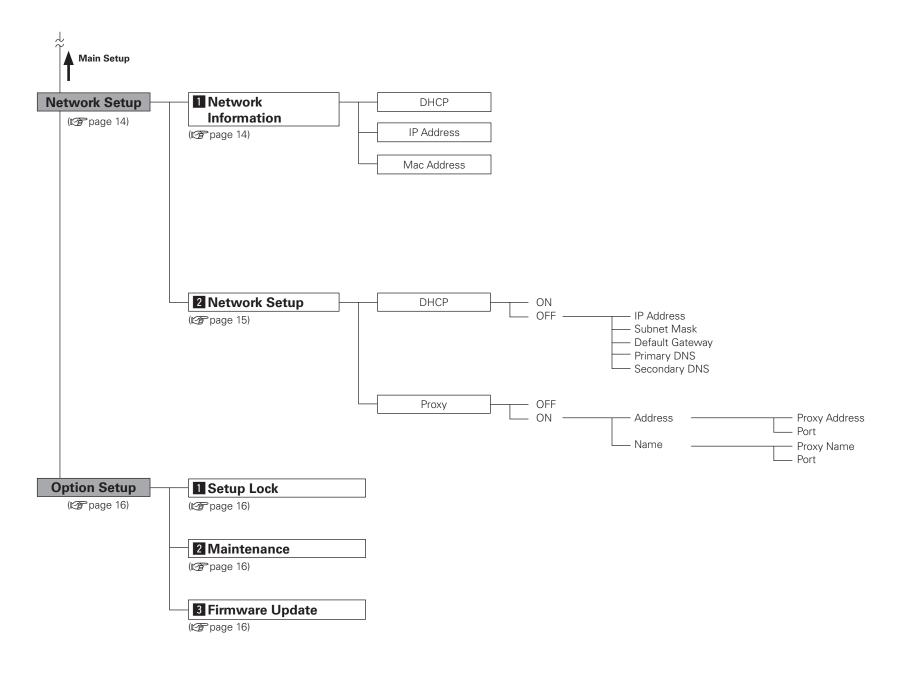


If you want to configure the settings for a specific ZONE, press the **ZONE 1** ~ **6** button for the ZONE concerned and configure the

- In this case, the setting item of another ZONE is not displayed.
- To configure the settings for "DIMMER MODE" and "POWER CONFIGURATION," use the **SETUP** button to select "Main Setup" mode.

# Menu Map





# **Main Setup** ● Menu tree ● Main Setup 1 VOLUME CONTROL 2 INPUT SELECT **3 LOW CUT FILTER** 4 OPERATION MODE 5 ZONETRIGGER ON MODE 6 DIMMER MODE 7 POWER CONFIGURATION

# 1 VOLUME CONTROL

Sets the volume level for each channel.

#### [Selectable Channels]

Channels which can be set in each mode.

	NORMAL MODE	BRIDGED MODE
CH 1	0	×
CH 2	0	0
CH 3	0	×
CH 4	0	0
CH 5	0	×
CH 6	0	0
CH 7	0	×
CH 8	0	0
CH 9	0	×
CH 10	0	0
CH 11	O	×
CH 12	0	0

Default: NORMAL MODE

O: Setting possible × : Setting not possible

[Variable range]  $---.-dB (-\infty)$  -90.0dB ~

## **2 INPUT SELECT**

Sets the input terminal for each channel.

#### [Selectable Channels]

For details of the channels which can be set in each mode, see Sets each of the following channel pairs. [Selectable Channels] in "1 VOLUME CONTROL".

#### [Selectable items]

	AUX	: AUDIO INPUT terminal of each ZONE.	
	BUS L	:L terminal of BUS INPUT :R terminal of BUS INPUT	
	BUS R		
	BUS L+R :L and R terminals of BUS INPUT.		
Innuts a L and R mixed mo		Inputs a L and R mixed mono signal	

# **3 LOW CUT FILTER**

Cuts the low frequency component of each channel. Turn this "ON" when there is a high volume of low frequency sound.

#### [Selectable Channels]

For details of the channels which can be set in each mode, see [Selectable Channels] in "1 VOLUME CONTROL".

#### [Selectable items]

ON	:Low frequency component is cut.
OFF	:Low frequency component is not cut

## **4** OPERATION MODE

Sets the output method for channels in each ZONE.

#### [Selectable Channels]

	NORMAL MODE	BRIDGED MODE
CH 1 & 2	0	0
CH 3 & 4	0	0
CH 5 & 6	0	0
CH 7 & 8	0	0
CH 9 & 10	0	0
CH 11 & 12	0	0

Default: NORMAL MODE

#### [Selectable items]

utput
ι

**BRIDGED**: BRIDGED-channel output (1-channel output)



- During NORMAL MODE, ZONE operations mode indicators are lit
- During BRIDGED MODE, ZONE operations mode indicators are lit orange.

## NOTE

The method of connecting speakers differs for each mode. Connect the speakers in accordance with the mode setting. For details, refer to "Speaker Connection" (@page 5).

## **5** ZONETRIGGER ON MODE

Sets the operating specifications for the power amplifiers of each ZONE.

#### [Selectable Channels]

For details of the channels which can be set in each mode, see (Selectable Channels) in "4 OPERATION MODE" (@page 13).

#### [Selectable items]

**CONSTANT**: The power amplifier operates constantly.

TRIG. IN

:The power amplifier operates when trigger input is detected

When trigger input is not detected, it remains in standby mode.

**A.SIGNAL**: The power amplifier operates when an audio signal is

If no input is received for a period of 10 minutes, it switches to standby mode.

OFF. : Turns the power amplifier off.



The POA-3012Cl accepts +3 ~ 30V trigger input.

# 6 DIMMER MODE

Adjust display brightness of the POA-3012CI.

## [Selectable items]

**Bright** : Normal display brightness.

Dim : Reduced display brightness.

Dark : Very low display brightness

**OFF** : Display is off unless controls are operated.



When setting to "Dim", "Dark" and "OFF", the display brightness changes to "Bright" for about 3 seconds during the operation before reverting to the set brightness.

# **7** POWER CONFIGURATION

Select the method for turning on the POA-3012CI.

#### [Selectable items]

**POWER BUTTON** 

Operate with the **ON/STANDBY** button only.

**ON LINE** 

Operate from an external device via Ethernet or RS-232C input.

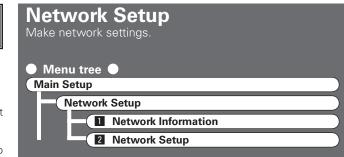
MASTER TRIGGER

: Operate by detection of a trigger signal input to the MASTER TRIGGER input terminal.

- Turns on when a signal is detected.
- If no input is received for a period of 10 minutes, it switches to standby mode.



- The POA-3012Cl accepts +3 ~ 30 V trigger input.
- Even when "ON LINE" or "MASTERTRIGGER" has been set, power source operation is possible by means of **ON / STANDBY** button.





- If you are using a broadband router (DHCP function), there is no need to make the settings at "Setting the IP Address" and "Setting the Proxy", since the DHCP function is set to "ON" in the POA-3012CI's default settings.
- If the POA-3012CI is being used connected to a network without the DHCP function, the network settings must be made. In this case, some knowledge of networks is required. For details, consult a network administrator.
- If you cannot connect to the Internet, recheck the connections and settings (Prpage 8).
- If you do not understand about Internet connection, contact your ISP (Internet Service Provider) or the store from which you purchased your computer.



#### • DHCP (Dynamic Host Configuration Protocol) :

These are systems by which the IP address and other network settings are automatically set for the POA-3012Cl, computer, broadband router and network devices.

DNS (Domain Name System) :

This is a system for converting the domain names used when browsing Internet sites (for example, "www.denon.jp") into the IP addresses actually used for communications (for example, "202.221.192.106").



[Items to be checked] DHCP= ON or OFF IP Address

**MAC Address** 

# Wired LAN settings

Use this procedure to configure the Wired LAN settings.

Connect the LAN cable ( page 8).

2 Network Setup

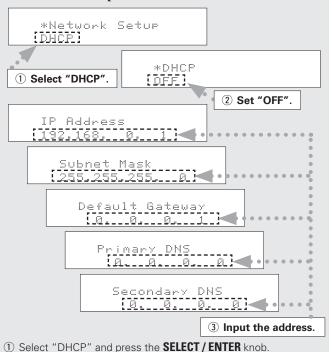
Make settings for wired LAN.

# Turn on the POA-3012CI (Page 17).

POA-3012Cl performs automatic network setup due to the DHCP function

When connecting to a network that has no DHCP function, perform the setting in step 3.

## Set the IP address at the menu "Network Setup" -"Network Setup".



(2) Turn the **SELECT / ENTER** knob to set "DHCP" to "OFF", then

press the **SELECT / ENTER** knob. The DHCP function is disabled.

- 3 Use the following buttons to input the address and press the **SELECT/ENTER** knob.
- \* Button functions when entering address SELECT/ENTER knob: Turn-----Select

Press.....Confirm

 $\triangle$  button : Cursor to right  $\nabla$  button : Cursor to left

**ZONE 6** button : Setting during address entry

ZONE 5 button · Cancel entry

#### IP Address

Set the IP address within the ranges shown below. The Network function cannot be used if other IP addresses are set.

CLASS A: 10.0.0.0 ~ 10.255.255.255 CLASS B: 172.16.0.0 ~ 172.31.255.255 CLASS C: 192.168.0.0 ~ 192.168.255.255

#### Subnet Mask

When connecting an xDSL modem or terminal adapter directly to the POA-3012Cl, input the subnet mask indicated in the documentation supplied by your provider. Normally input 255.255.255.0.

#### Default Gateway

When connected to a gateway (router), input its IP address.

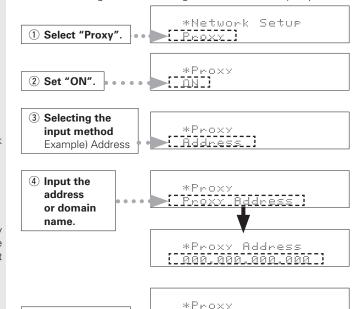
#### Primary DNS Secondary DNS

If there is only one DNS address indicated in the documentation supplied by your provider, input it at "Primary DNS". If there are two or more DNS addresses, input the first one at "Secondary DNS".

- (4) Press the **SELECT / ENTER** knob. Setup is complete.
- \*When connecting to the network via a Proxy server, select "Proxy" and press the **SELECT / ENTER** knob (@page 15 "Proxy settinas").

## □ Proxv settings

Make this setting when connecting to the Internet via a proxy server.





(IPG: III

\*Proxy Port

2 Turn the **SELECT / ENTER** knob to set "Proxy" to "ON" and press the **SELECT / ENTER** knob. The proxy server is enabled.

3 Turn the **SELECT / ENTER** knob to select the proxy server input method, and then press the  $\nabla$  button.

## [Selectable items]

5 Select "Port".

6 Input the port

number.

Address : Select when inputting by address. Name: Select when inputting by domain name.

## [Characters that can be input]

A~Z a~z 0~9 !#%&'()\*+,-./:;=-?@[\](space)

- 4 Use the following buttons to input the proxy server address or domain name and press the **SELECT / ENTER** knob.
- \* Button functions when entering address

SELECT / ENTER knob: Turn ...... Select

Press.....Confirm

Cursor to right  $\triangle$  button :  $\nabla$  button : Cursor to left

**ZONE 6** button : Setting during address entry

**ZONE 5** button · Cancel entry

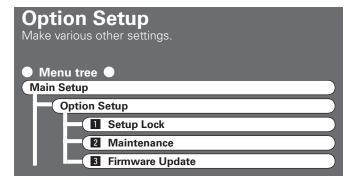
**DISPLAY** button: Character insert / delete / overwrite

Cursor ► Character insert

Cursor **◄** : delete Cursor ■ : overwrite

When "Address" is selected in step (3): Input the address When "Name" is selected in step 3 : Input the domain name

- (5) Turn the **SELECT/ENTER** knob to select the "Port" and press **SELECT/ENTER** knob.
- (6) Use the above buttons to input the proxy server port number and press the **SELECT/ENTER** knob.
- 7 Press the **SELECT/ENTER** knob. Setup is complete.



# 1 Setup Lock

Protect settings from inadvertent change.

#### [Selectable items]

ON : Turn protection on. : Turn protection off.



To cancel the setting, press the **SETUP** button to re-display the "Setup Lock", then change the setting to "OFF".

## 2 Maintenance

This sets the function for maintenance by a DENON serviceperson or installer. (For professional use only.)

This function allows a DENON serviceperson or installer to check the POA-3012CI's status and make settings via the Internet.

## NOTE

Only use this function if so instructed by a DENON serviceperson or installer.

# 3 Firmware Update

Update the firmware of the multi channel power amplifier.

## **Update Check**

You can check for firmware updates. You can also check approximately how long it will take to complete an update.

#### **Update Start**

Execute the update process.

When updating starts, the power indicator lights red. "Updating \* \* \* " is shown on the display during updating. Once updating is completed, "Updatingcomplete" is displayed.

"Latest firmware" is displayed when the firmware is the latest version.

\* If the display reads as shown below, check the settings and network environment, then update again.

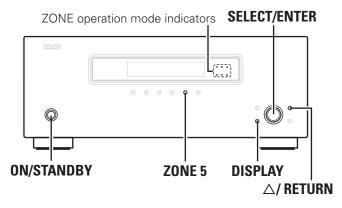
Display	Description			
Updating failed	Updating failed.			
Login failed	Failure to log into server.			
Server is busy	Server is busy. Wait a while then try again.			
Connection fail	Failure connecting to server.			

#### NOTE

- Connection to the network and specific settings are required to update the firmware. For details, see page 8, 15.
- Do not turn off the power until updating is completed.
- Normally there is no need to use this function, aside from the cases described below.
- · The Firmware Update function is only used for updating the firmware (free or for a charge) via the Internet, for example for the purpose of adding functions to the POA-3012Cl in the future.
- · Information regarding the Firmware Update function will be announced on the DENON web site each time related plans are
- · A broadband connection to the Internet is required to use this function (r page 8).
- · Even with a broadband connection to the Internet, approximately 13 min is required for the updating procedure to be completed. Once updating starts, normal operations on the POA-3012Cl cannot be performed until updating is completed.

Furthermore, updating the firmware may reset the backup data for the parameters, etc., set for the POA-3012CI.

# **Operations**

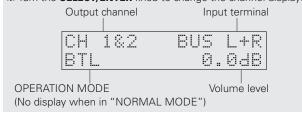


# **Turning the Power On**

#### Press the **ON / STANDBY** button.

The power indicator flashes green and the power turns on.

- \* The signal input to each channel is output from the speaker terminal of each channel.
- \* The setting status of each channel is indicated on the display.
- \* Turn the **SELECT/ENTER** knob to change the channel displayed.



#### ☐ To return to STANDBY

Press the **ON / STANDBY** button again.

The power indicator lights red.

# NOTE

- When the "POWER CONFIGURATION" is set to "MASTER TRIGGER", the device will automatically enter the standby status when no trigger input is detected for a period of 10 minutes.
- When the "POWER CONFIGURATION" is set to "ON LINE", send a standby command to the ETHERNET terminal or the RS-232C terminal of the POA-3012CI.
- 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, unplug the power cord from the power outlet.

# **Check the Status of Each Channel**

# Press the DISPLAY button.

- \* Zone status is indicated on the bottom line of the display.
- \*\* Turn the **SELECT / ENTER** knob to change the display as follows.



# Press the DISPLAY button again.

- \* System status is indicated on the bottom line of the display.
- \* Turn the SELECT / ENTER knob to change the display as follows.

POWER CONFIG ← → DIMMER

## ☐ To Return to the Regular Display

Press the  $\triangle$  / **RETURN** button until the display returns to normal.

# **Other Operations**

# **Other Operations During Playback**

# ☐ To Adjust the Volume

Refer to "VOLUME CONTROL" on the "Main Setup" menu (@page 13).

## ☐ To Switch Input Setting

Refer to "INPUT SELECT" on the "Main Setup" menu (F) page 13).

## ☐ To Reduce the Low Frequency Volume

Refer to "LOW CUT FILTER" on the "Main Setup" menu (P page 13).

# Operating the POA-3012Cl Using a Browser (Web control)

This function lets you operate the POA-3012Cl using Internet Explorer.

**◀** Check the POA-3012CI's IP Address.

"Network Setup" - "Network Information" (@page 14)

# **2** Input the POA-3012CI's IP Address in Internet Explorer.

For example, if the IP address is "10.3.18.90", enter  $\frac{10.3.18.90}{10.3.18.90}$ .

**?** If the top menu is displayed, click "Setup Menu".



When the "Setup Menu" is displayed, click on the menu you want to operate.



Click the menu
CHANNEL SETUP ( E Example : 1)
SYSTEM SETUP ( E Example : 2)
WARNING AND PROTECTION DATA

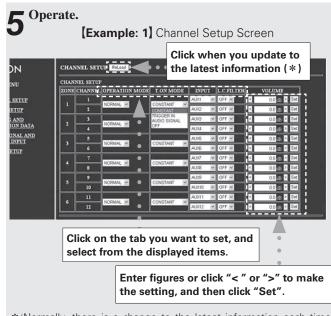
(@ Example : 3)

AUDIO SIGNAL AND TRIGGER INPUT ( E Example : 4)

OPTION SETUP ( Example : 5)

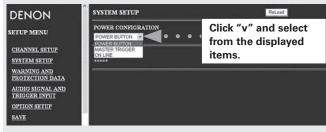
Click "SAVE" when you want to save settings, and click "LOAD" when you want to call settings.

Becomes each operation screen.

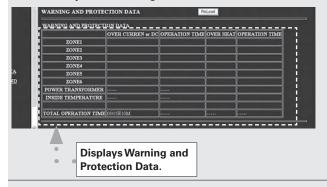


\*: Normally, there is a change to the latest information each time vou operate. When operated from the main unit, click because the screen is not updated.

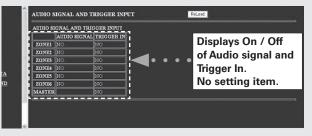




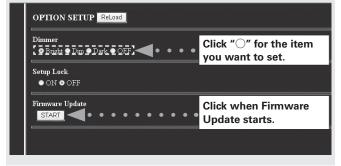
## [Example: 3] Warning and Protection Data Screen



[Example: 4] Audio Signal and Trigger Input Screen



[Example: 5] Option Setup Screen





To use the web control function, set the menu "Main Setup" -"POWER CONFIGURATION" - "ON LINE" (F) page 14).

#### NOTE )

- To perform web control, you must connect a web control device such as a PC to the same network as the POA-3012Cl
- With web control, some network settings, etc., cannot be set.
- When updating firmware, settings made by the web controller may be reset.

# **Resetting the Microprocessor**

Perform this procedure if the display is abnormal or if operations cannot be performed.

When the microprocessor is reset, all the settings are reset to their default values.

- Unplug the power cord from the power outlet.
- **2** Turn the power on (or connect the power cord to the power outlet) while simultaneously pressing the **ZONE 5** and **DISPLAY** buttons.
- **→** When all Zone operation mode indicators are illuminated in red and " \*EEPROM INIT.\*" is displayed, release finger from two buttons.



If in step 3 the could not be start over from step 1.

# **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 owner's manual?
- 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	Countermeasure	Page
When the power is turned on, the power indicator does not light and no sound is produced.	The power supply cord's plug is not fully plugged in.	Make sure the unit is correctly plugged in and switched on at the mains socket.	10
The power indicator lights but no sound	• The speaker cables are not fully connected.	Connect securely.	5
is produced.	• The device you want to listen to has not been selected.	• Insure the correct input is selected.	7
	• The volume control is set to minimum.	• Set to an appropriate level.	17
	• The input cable is not fully connected.	Connect securely.	7
	• The speaker cable is not connected properly for the operation mode.		5
	The input connector is not connected properly.	Connect the input connector correctly (in the case of BRIDGED input for each ZONE, input to an even-numbered channel.)	7
	The "Turn On" command is not input from the external terminal when the ZONE TRIGGER ON MODE is set to ON LINE (the ZONE operation mode indicator is not lit).  The "Turn On" command is not is not lity.	• Send the "Turn On" command from the external device.	9, 14
	• Trigger voltage is not input to the TRIGGER IN terminal from the external device when the ZONE TRIGGER ON MODE is set to "TRIG. IN".	• Input the trigger voltage from the external device.	9, 14

# **Specifications**

Rated output: 12-channel driving, NORMAL operation:

> $30 \text{ W} \times 12 \text{ ch}$  (8  $\Omega$ /ohms, DIN 1 kHz with 0.7 % T.H.D.) 50 W x 12 ch (4  $\Omega$ /ohms, DIN 1 kHz with 0.7 % T.H.D.)

6-channel driving, BRIDGED operation:

 $100 \, \text{W} \times 6 \, \text{ch}$  (8  $\Omega$ /ohms, DIN 1 kHz with 0.7 % T.H.D.)

Total harmonic distortion: 0.05% (Rated output: –3 dB, 8 Ω/ohms, 1 kHz) Output terminals: Speaker  $4 \sim 16 \Omega/\text{ohms}$  (NORMAL operation) Speaker  $8 \sim 16 \Omega/\text{ohms}$  (BRIDGED operation) Input sensitivity / Input impedance: 550 mV / 47 kΩ/kohms (NORMAL operation)

275 mV / 47 kΩ/kohms (BRIDGED operation)

29 dB (NORMAL operation) Gain: 35 dB (BRIDGED operation)

Frequency response: 5 Hz ~ 40 kHz (Low cut filter: OFF)

S/N raito: 95 dB (input terminals short-circuited, with A-weightied network)

Cut off freguency 80 Hz (-12 dB/oct. Low cut filter: ON) Low cut filter:

Trigger in level: 3 ~ 30 V DC

Trigger out level: 12 V DC, 250 mA MAX

**Power Supply:** AC 120 V, 60 Hz (North America model) / AC 230 V, 50Hz (Europe model)

**Power Consumption:** 2.5 A (North America model) / 230 W (Europe model)

Standby: 0.5 W or less

(When the "POWER CONFIGURATION" is set to "POWER BUTTON")

Maximum external dimension: 434 (W) x 171 (H) x 410 (D) mm (17-3/32" x 6-47/64" x 16-9/64")

Weight: 19.0 kg (Approx 41 lbs 14.2 oz)

\* For purposes of improvement, specifications and design are subject to change without notice.

