

# Phasemation

## EPA-007x HEADPHONE AMPLIFIER Owner's Manual

Thank you for purchasing Phasemation product. Read your Owner's Manual thoroughly for proper operation before starting to use your equipment.

On the first time using your equipment, please perform a pre-conditioning interim operation. Without so, this device will still output sounds but to gain the maximum sound quality of the equipment, it is necessary to activate the internal electronic parts by passing electric current for about a week.

Please keep your Owner's Manual with caution along with the warrantee document.

### Safety Instructions

#### Warnings

- In case of using the equipment in an abnormal state, such as seeing smoke, having strange smell or hearing unusual sounds or noises, this can result in a risk of fire or electric shock. If such an abnormal state occurs, turn the power switch off and endure to disconnect the AC plug from the outlet. After no smoke is confirmed, ask the dealer for the repair.
- Do not disassemble the equipment or remodel it. This can result in a risk of fire.
- Do not use the equipment in the bathroom. This can result in a risk of fire or electric shock.
- The equipment is designed for using indoors. Do not expose the equipment to water. This can result in a risk of failures, fire and electric shock.
- Do not put a vase, flower pot, glass or any object filled with skin lotion, chemical substance or water, or small metal objects on the equipment. In case the liquids are spilled or the small objects fall inside the equipment, this can result in a risk of fire or electric shock.
- If a foreign object has fallen inside the equipment, turn the amplifier's power switch off and contact the dealer. To keep using the equipment can result in a risk of fire or electric shock.

#### Cautions

- Do not install the equipment on the unstable tables or unstable places. In case the equipment falls, it can result in a risk of injury of customers. When moving the equipment, turn the power switch off and endure to disconnect the power plug from the outlet and remove the connecting cord. The cord can be damaged and this can result in a risk of fire and electric shock.
- Pay attention to the wiring of the cord so that a foot is not caught or the person can stumble or the equipment can fall, which is so dangerous.
- When connecting with another audio equipment or a television set, read the manual of the equipment, turn the power switch off, and connect according to the instructions.
- When using headphones, do not increase the volume too high. Listening at a high volume for long can cause a bad effect on the hearing ability.

### Usage Cautions

#### Installation Place

In order to use the equipment for a long time, follow the instructions shown below.

- Do not install this equipment near a heat source such as direct sun light, a stove and so forth.
- Do not use this equipment at a poorly-ventilated, humid or dusty place.
- Do not install this equipment at an unstable place such as a slope or vibrating place.
- Do not install this equipment near the window where the equipment can be exposed to rain.
- Do not install this equipment in a high humid environment.
- Avoid using this equipment on another equipment that generates heat such as an amplifier.
- Keep this equipment away from a power supply transformer or a motor of another equipment.

Avoid covering the equipment with cloth or installing it in an enclosed space because heat radiation and air convection from the chassis surface can be hindered.

At the amplifier section, to prevent external sound pressure, grit and dust from entering the equipment, inspiratory/exhaust ports to radiate the heat are not arranged against the equipment consciously. Radiating the heat from the equipment is realized by cooling it with air convection in the chassis and with heat radiation and air convection from the chassis having high thermal conductivity.

#### Usable AC Power Supply Voltage and Frequencies

- An AC 230V power supply must be supplied.
- The equipment operates normally in both areas of the 50Hz and 60Hz power supply frequencies.

#### Handling the AC Power Cable

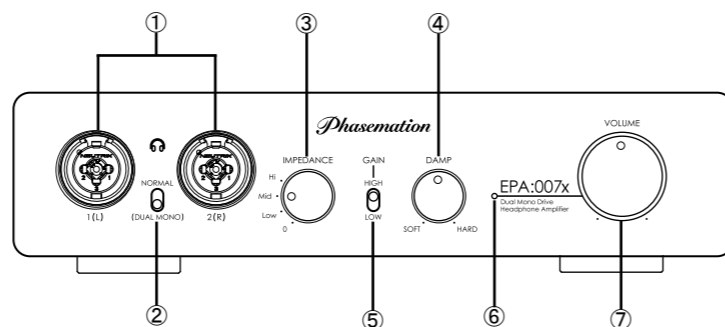
- Do not touch the AC power cable with wet hands.
- Do not pull the cable strongly or bend the cable. The cable can be damaged and can result in a risk of fire or electric shock.
- Use the AC power cable of the accessories.

#### Repair

- In case of the equipment failure, consult the dealer.

### Names and Functions

#### Front Panel



- ① **Headphone Jack** This is the jack to connect to the headphones. Either balanced XLR terminals or normal phone plugs of 6.3Ø may be used.
- If connecting four-wire headphones, connect each of them to the L,R jacks.

- ② **NORMAL/DUAL MONO Changing Switch** Switch to NORMAL (top) for normal headphones and to DUAL MONO (bottom) for four-wire headphones. Sounds will output at either position but for the four-wire, it can exert the maximum performance when set to DUAL MONO (bottom).  
In addition, always use at NORMAL (top) for normal headphones. Sounds will output even at DUAL MONO (bottom) but the cross talk will deteriorate and will not output proper sounds.

- ③ **Impedance Selector** Set to 0 if not using the damp control function. If using the damp control function set the desired impedance to suit the headphones.

※ Let the values written below be the standard for the impedance settings. The characteristics may differ depending on the headphones and therefore settings may be made other than what is written below. Use at the desired position.

200 Ω or less	: LOW
200 - 500 Ω	: MID
500 Ω or more	: HIGH

- ④ **Damp Controller** The impedance selector becomes valid when at a position other than 0. If turned right, it changes the tone hard and soft if turned left. Use by adjusting to the desired tone.

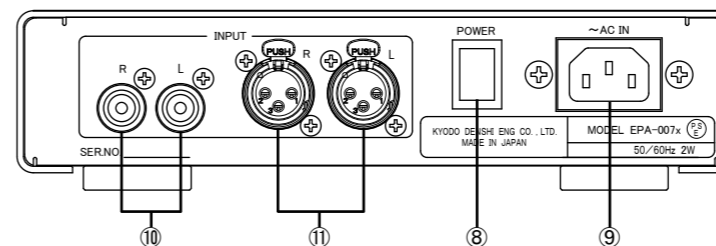
- ⑤ **Gain Changing Switch** Change it to the matching headphone efficiency. Generally recommendable is to set low impedance types having 100 Ω or less to LOW and high impedance types having 100 Ω or more to HIGH.  
※ The HIGH/LOW gain differential is approximately 8dB.

- ⑥ **Performing Indicator** Turn the power on and it will light up green after 2 to 3 seconds. In this condition, sounds can come out from the headphones. It will light off if the cut-off protector performs when it is abnormal.

- ⑦ **Main Volume** This is the knob to adjust the volume  
The volume increases if the knob is turned clockwise and decreases if turned counterclockwise.

※ Even if the unit's volume is turned down, the sound quality deterioration is small due to the usage of a special volume circuit and therefore even if the volume is turned completely to the left, it will not go to complete silence and this is not a deflection.

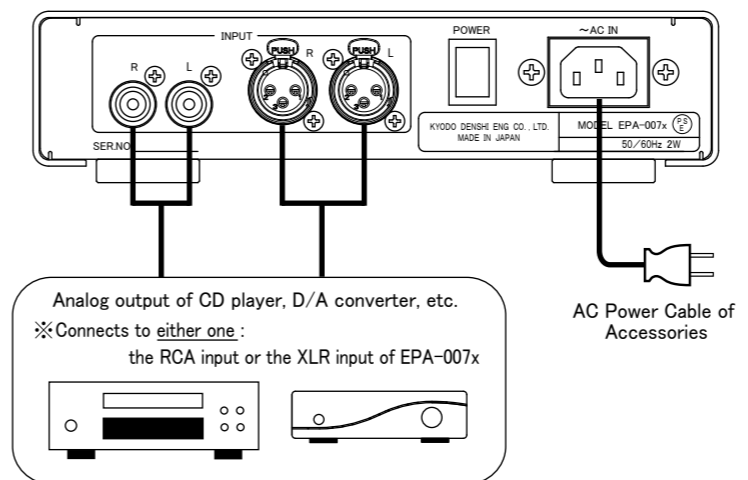
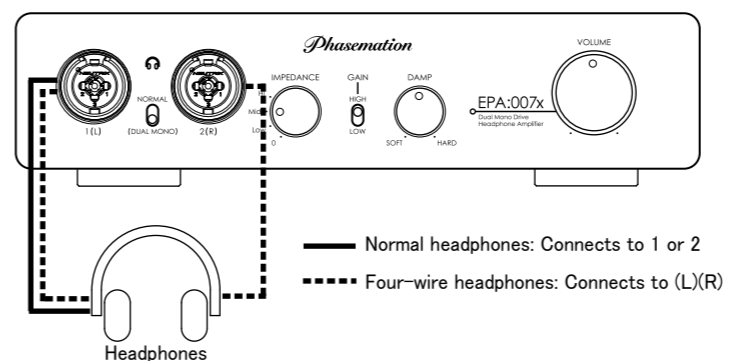
#### Rear Panel



- ⑧ **Power Switch** This is the switch that turns the power on/off.
- ⑨ **Power Inlet Terminal** This connects to the power outlet with the attached AC power cable.
- ⑩ **Analog Input Connector (RCA)** This is a connector to connect the unbalanced type analog output. Input impedance is about 10k Ω.
- ⑪ **Analog Input Connector (XLR)** This is a connector to connect the balanced type analog output. The polarity is no.1 GND, no.2 HOT, and no.3 COLD. The impedance for both HOT and COLD is about 10k Ω with respect to GND.

※ RCA and XLR cannot be used at the same time.  
Must use connecting to only one system.

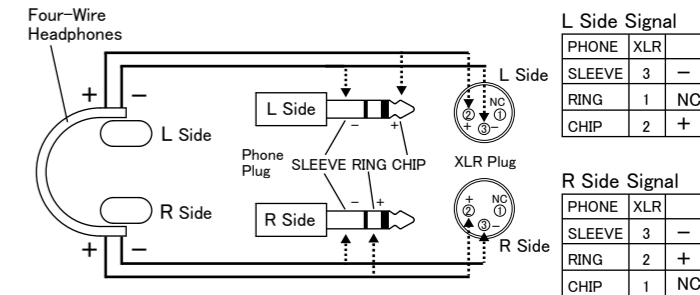
### Connections



### User Support

As for the unclear matters with regards to the after service, please contact the dealer.

### Headphone Plug DUAL MONO Wiring Specifications



If using four-wire headphones at DUAL MONO, the wiring specifications is as shown above. Check it when purchasing or creating four-wire headphones.

### Trouble Shooting Guide

In case the equipment does not operate properly, check out the followings. If it does not operate properly even after checking the advised points, then contact the dealer.

Trouble	Causes	Measures
The power is not supplied	● The plug of the AC power cable is not plugged in completely.	● Insert the plug of the AC cable into an outlet firmly. ● Firmly insert the plug of the AC power cable into the AC inlet of the power equipment.
The sound is not heard	● The audio wires are not plugged in completely. ● No analog input signals. ● Connection of headphone terminals is insufficient. ● Cut-off protector is performing.	● Insert the audio wires completely. ● Carefully check the condition of the connected device. ● Check that the plug is properly inserted to the inner end of the headphone terminal. ● There is a possibility that the connected device is defected.
Hum noises are heard	● The audio wires are not plugged in completely. ● A power supply transformer or motor in another equipment is installed near this equipment.	● Insert the audio wires completely. ● Place this equipment apart from the power supply transformer or a motor of another equipment.

### Specifications

Product	Dual Monodrive Headphone Amp
Input	Analog Balanced/Unbalanced (XLR/RCA) 1 System ※ XLR and RCA cannot be used at the same time
Output	Jacks which may be used for XLR or 6.3 Ø phones (x 2)
Input Impedance	Unbalanced (RCA) / About 10k Ω Balanced (XLR) HOT-COLD interval / About 20k Ω
Frequency Response	20-100kHz -0.5dB
Supporting Headphone Impedance	16-600 Ω
Residual Noises	50 μV or less
Cross Talk	90dB or more
Power Consumption	2W (AC230V 50/60Hz)
Maximum Outer Dimensions	220 (width) x 57 (height) x 234 (depth)
Weight	2kg
Accessory	AC Power Cable

● The appearance and specifications of this equipment are subject to change without notice in order to make improvements.

# Phasemation

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Phasemation is the original audio brand of Kyodo Denshi Engineering Co., Ltd.