Phasemation

EA-200

PHONO AMPLIFIER

Owner's Manual

Safety Instructions

In this owner's manual, the regulations for safely using Phasemation EA-200 are described below together with pictures in order to avoid the loss of the customer's assets and to protect our customers from harm.

⚠ WARNING	This picture indicates that a person can cause serious injury or death.
⚠ CAUTION	This picture indicates that a person can cause serious injury or an object could be damaged.

⚠ WARNING

- Do not use the equipment being broken. In case of using the equipment in an abnormal state such as seeing smoke, having a strange odor, or hearing unusual sounds/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 power plug from the outlet. When no smoke is confirmed, ask the dealer for repair.
- Do not disassemble or remodel the equipment. 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 failure, fire, and electric shock.
- Do not put vases, plant and flower pots, any objects filled with skin lotion, chemicals and water, and small metal objects on the equipment. In case liquids are spilled or small objects fall inside the equipment, this can result in a risk of fire or electric shock.
- In case foreign objects fall inside the equipment, turn the power switch off and contact the dealer. To keep using the equipment can result in a risk of fire and electric shock.

⚠ CAUTION

- Do not install the equipment on unstable tables or unstable places. In case the equipment falls, it can result in a risk of injury of customers. When moving, turn the power switch off, and endure to disconnect the AC 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. When a foot is caught by the cord, the person can stumble or the equipment can fall, which is so dangerous.
- Do not install the equipment in humid or dusty environments. This can result in a risk of fire or electric shock.
- When connecting with other audio equipments or television sets, read the manuals of each equipment, turn the power switch off and connect according to the instructions.

Safety Instructions

Installation

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

- Do not install near any heat sources such as direct sun light, stoves and other equipments that produce heat.
- Do not use this equipment in poorly-ventilated, humid, and dusty places.
- Do not install in unstable places such as slopes and vibrating places.
- Do not install it near the window where the equipment can be exposed to rain.
- Do not install this equipment in hot environments.
- Avoid using this equipment on equipments generating heat such as an amplifier.
- When using, remove this equipment from a power supply transformer or a motor of another equipment.

AC power cable treatment

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

Repair of the equipment

- If the equipment is in need of repair, refer servicing to qualified service personnel.

Main Features

1. The only equipment among the class with a non-feed back type amplifying circuit composed of only discrete parts.

   - Aiming for an expansion of music expression, an all-step non-feedback circuit which performs a current-amplifying-operation suiting to the semiconductor is newly developed and adopted. Excellent expressions of uplifting feeling, dynamics, and shading-feeling which are only produced by the non-feedback circuit can be enjoyed.
   - Only discrete parts are adopted in the circuit, which could be called the only equipment among this class. As a result, all of "rich gradational expression of sound, uplifting feeling, high S/N ratio, and fantastic space representation" are simultaneously achieved at high level, equivalent to an upper class equipment which was difficult on phono amplifiers of this class.

2. Solid chassis structure and Dual monaural pattern

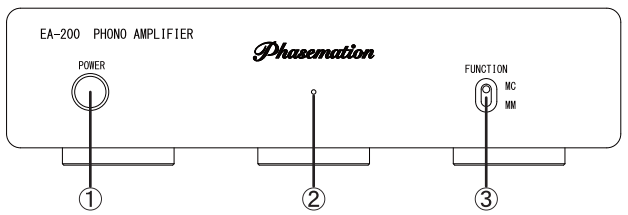
   - The chassis base using 1.2 mm thick steel plate and the top cover using 1.6 mm thick steel plate used with this equipment are treated with copper plate, and furthermore, they are finished with painting to restrain vibration. By synergistic effect with the front panel using 8 mm thick aluminum plate, this equipment achieved reduction of magnetic distortion and securing the strength of rigidity.
   - Builds the dual monaural layout of the same pattern of the left and right, and actualizes a uniformity of the left and right channels at a high level.
   - By adopting the large R-core transformer and supplying power without any common power impedance due to left/right individual powers, a channel separation of 90dB or more (20Hz to 20kHz) is accomplished.

3. Introduction of parts for high sound quality.

   For RIAA impedance devices and main parts of the signal line that greatly influence the sound quality, the parts for high sound quality parts such as metal film resistor and high quality film capacitor which are acknowledged are adopted. The power supply circuit is designed to decrease the noise greatly by adopting fast recovery diodes of considerably higher rating and low noise zener diodes, in order to prevent the increase of recovery time in the large current range.

Names and Functions

Front Panel

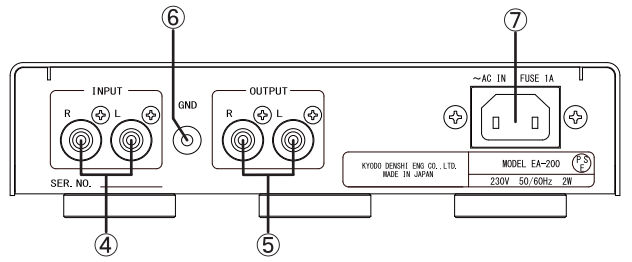


① POWER Switch — Turns the power on or off. If the switch is pressed, the power is turned on.

② POWER Indicator — The power indicator lights up blue when the circuit condition is stabilized.
Right after the power switch is turned on or the FUNCTION switch is switched to MM or MC, it lights up red and a sound is not outputted until the circuit condition becomes stabilized.

③ FUNCTION Changeover Switch — Set the FUNCTION switch to the MC position when an MC cartridge is used; set it to the MM position for an MM cartridge or for an MC cartridge with a high output voltage of 1.5mV or more.
In order to prevent a noise generation, the equipment is designed so that the sound is not outputted right after switching the FUNCTION switch to MC or MM. (② POWER Indicator: red)
The sound is outputted after the ② POWER indicator is changed to blue.

Rear Panel



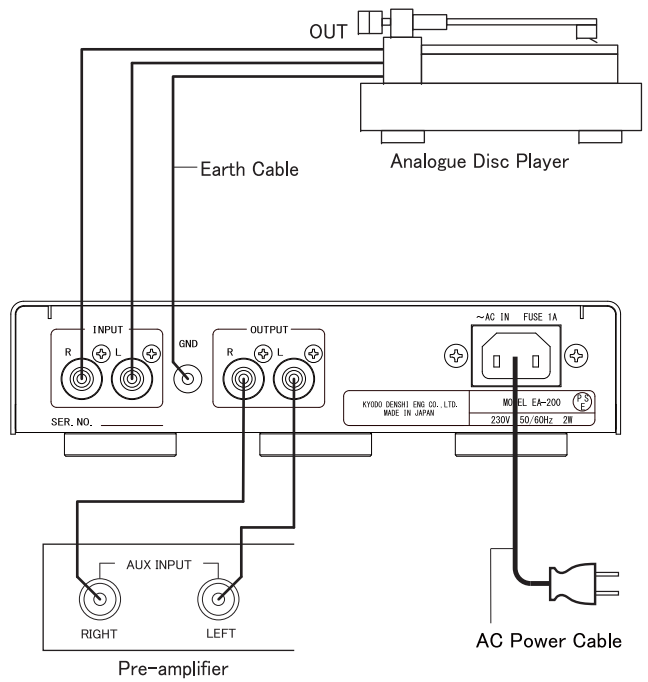
④ Phono Amplifier Input Terminal — Connect the signal wires of your analogue disc player with L and R respectively.

⑤ Phono Amplifier Output Terminal — Connect the EA-200 OUTPUT terminals to the input terminals for line level (150 to 250mV) such as AUX terminals of the pre-amplifier.
＊Do not connect them to the phono input terminals of a pre-amplifier having a built-in phono amplifier. Due to the excessive input, the sound will be distorted.

⑥ Earth Terminal (GND Terminal) — Connect the earth cable of the analogue disc player with the GND terminal.

⑦ Power Inlet Terminal — Connect the attached AC power cable to the power inlet terminal.

Connection



Trouble Shooting Guide

In case the equipment does not operate properly, check out the followings.

Troubles	Causes	Measures
The power indicator is not lit.	● The AC power cable is not plugged in completely.	● Insert the AC power cable into the socket firmly. ● Firmly insert the AC power cable into the AC inlet terminal of this equipment.
The sound does not come out.	● The signal wires are not plugged in completely.	● Insert the signal wires completely.
High range sound is not reproduced.	● An MM cartridge is used, but the FUNCTION conversion switch is set to MC.	● Position the FUNCTION conversion switch to MM.
Sound is distorted.	● The OUTPUT terminals of this equipment are connected to the input terminal of the phono of pre-amplifier.	● Connect to the input terminal for line level (such as AUX) of pre-amplifier.
Hum sound comes out.	● Connection of signal wire is not enough. ● The earth cable from the analogue disc player is not connected. ● A power supply transformer or motor of other electric device is placed nearby.	● Plug in the signal wires completely. ● Connect the earth cable completely. ● Place this equipment apart from a power supply transformer or the motor of another electric device.
Sound does not come out immediately after switching on the power supply.	● Sound does not come out until the condition of internal circuit is stabilized.	● Wait until the power indicator is changed to blue.
The power is turned off and a hollow sound comes out after a while.	● This is the sound due to a short circuit to be driven in this equipment.	● The sound is normal.

Specifications

Model	MM/MC Non-Feedback Type Phono Amplifier	
Function	MM	MC
Input Level	2.5mV	0.12mV
Input Impedance	47k Ohm	470 Ohm
Gain	38dB	63dB
Input Equivalent Noise	−124dBV	−140dBV
Maximum Allowed Input	90mV	4mV
Rated Output Voltage	200mV (1kHz)	
RIAA Curve Deviation	±0.3dB (20 to 20k Hz)	
Output Impedance	250 Ohm	
Channel Separation	90dB and over (20 to 20k Hz: MM/MC both)	
Power Consumption	2W (230VAC 50/60 Hz)	
Dimensions	W220mm x H57mm x D228mm	
Mass	2.6kg	

Accessories: AC power cable

●Dimensions and specifications are subject to change without notice in order to improve it.

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