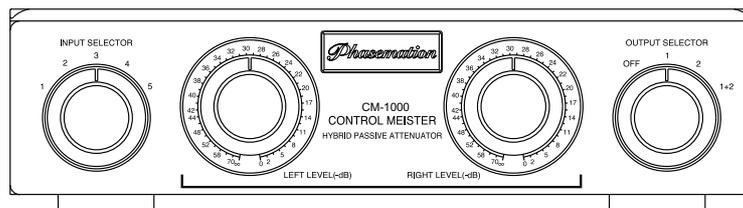


Owner's Manual

CM-1000

CONTROL MEISTER HYBRID PASSIVE ATTENUATOR



Phasemation

Thank you for purchasing Phasemation product.

Read your Owner's Manual thoroughly for proper operation before starting to use your equipment.

Please keep your Owner's Manual with caution.

Table of Contents

Safety Instructions.....	3
Usage Cautions.....	4
Care of Equipment.....	4
Names and Functions (Front Panel).....	5
Names and Functions (Rear Panel).....	6, 7
Trouble Shooting Guide.....	8
Specifications.....	8

Safety Instructions

In this owner's manual and on the product, various pictures are used to show our customers how to use Phasemation CM-1000 safely and properly in order to avoid the loss of customer's assets and to protect our customers from harm.

The pictures and their meanings are as follows:

 WARNINGS	<ul style="list-style-type: none"> ■ Do not use the equipment being broken. 	 	<ul style="list-style-type: none"> ● In case of using the equipment in an abnormal state, such as seeing smoke, having strange smell, and hearing unusual sounds or noise, this can result in a risk of fire or electric shock. If such an abnormal state occurs, turn the power switch off, and ensure to disconnect the AC adaptor from the outlet. When no smoke is confirmed, ask dealer for the repair.
	<ul style="list-style-type: none"> ■ Never remodeling the equipment 		<ul style="list-style-type: none"> ● Do not put the equipment apart or remodel. This can result in a risk of fire.
	<ul style="list-style-type: none"> ■ Never installing the equipment near water 	 	<ul style="list-style-type: none"> ● 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.
	<ul style="list-style-type: none"> ■ Never placing objects filled with water on the equipment 		<ul style="list-style-type: none"> ● Do not put vases, plant and flower pots, glass, any objects filled with skin lotion, chemicals and water, and 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.
	<ul style="list-style-type: none"> ■ Never putting objects inside the equipment 		<ul style="list-style-type: none"> ● In case foreign objects fall 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 and electric shock.

 CAUTIONS	<ul style="list-style-type: none"> ■ Installation 		<ul style="list-style-type: none"> ● 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. ● 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 moving, turn the power switch off, and ensure 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.
	<ul style="list-style-type: none"> ■ Places which are not suitable for installation 		<ul style="list-style-type: none"> ● Do not install the equipment in the humid or dusty environment. This can result in a risk of fire or electric shock.
	<ul style="list-style-type: none"> ■ Connection 		<ul style="list-style-type: none"> ● When connecting with other audio equipments or television sets, read the manual of equipment, turn the power switch off, and connect according to the instructions.

Usage Cautions

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 objects that produce heat.
- Do not use this equipment at the poorly-ventilated, humid and dusty places.
- Do not install this equipment at unstable places such as slopes and vibrating places.
- Do not install this equipment near the window where the equipment can be exposed to rain.
- Do not install this equipment in high humidity environment.
- Avoid using this equipment on equipment generating heat such as an amplifier.
- Keep this equipment away from a power supply transformer and motor of other equipment.

Repair

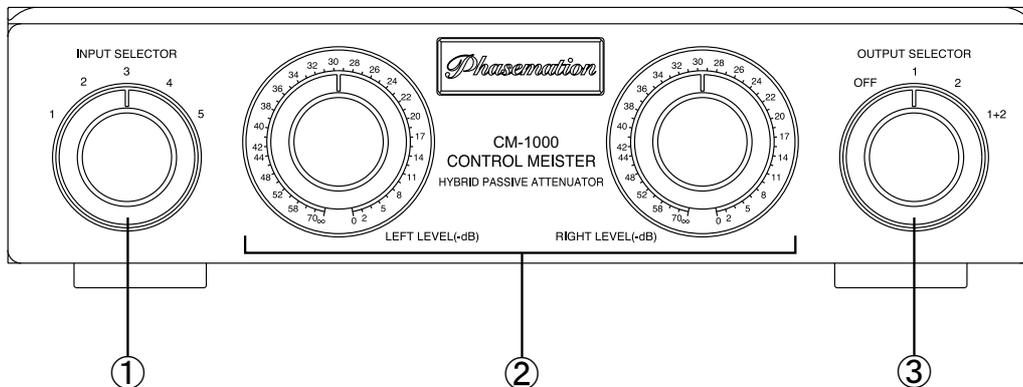
- In the case of the equipment failure, consult the dealer.

Care of Equipment

- ◎ If the equipment is covered with dust or dirt, clean only with a dry cloth.
- ◎ If the equipment is covered with heavy dust, prepare a soft cloth and put a very thin mild detergent. Wring the cloth and wipe off the dust and dirt. Then, clean with a dry cloth.
- ◎ Do not use the chemical agents such as thinner, naphtha and alcohol when cleaning. If any of them is attached to the equipment, the silk printing can be flaked or the surface can lose metal luster.
- ◎ To enjoy the high quality audio sound, please perform the following procedure two or three times a year.
 1. Insert the short pin plug of accessories into the unbalance output terminals, OUTPUT (1).
 2. Short the outputs.
 3. Output a signal for approximately 10 seconds.Then the magnetic quantity magnetized to the cores of output transformers will be decreased and the operating point will become more stable.

Names and Functions

Front Panel



① INPUT SELECTOR knob

The input terminal corresponding to the source played can be selected.

② LEFT LEVEL & RIGHT LEVEL knobs

The volume can be controlled; so, when the knob is turned to the right (clockwise rotation), the volume is increased; and when it is turned to the left (counterclockwise rotation), the volume is decreased.

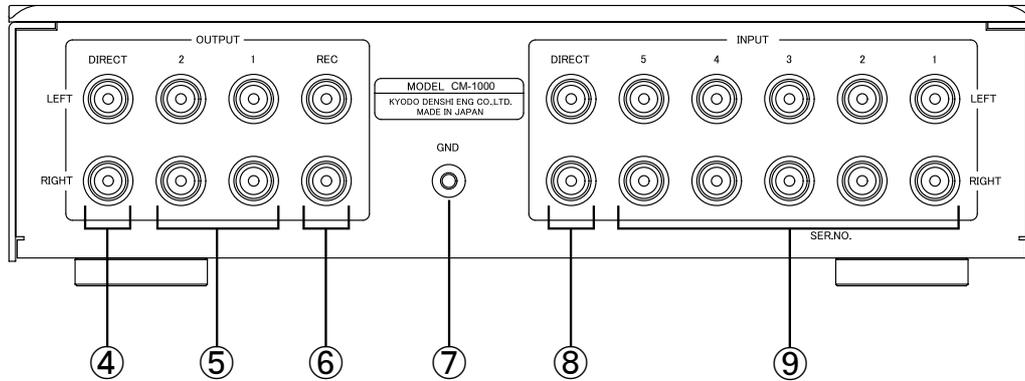
Note

For a source having many low frequency components or for volume change of large steps (in the region lower than 8:00 direction), a popping noise may be heard from the speakers by operating the MASTER VOLUME knob. However, this phenomenon is not failure and the noise can occur because of being switched to the attenuation grade which is changed by the high precision rotary switch volume control system.

③ OUTPUT SELECTOR knob

The unbalance output terminals 1 and 2 of RCA pin-connector can be selected independently, or be turned off.

Rear Panel



④ OUTPUT-DIRECT terminals

The audio signals to be outputted from these terminals pass through the shortest path of this equipment because they skip the OUTPUT SELECTOR; however, these terminals should be used only for the case that only one piece of next audio equipment is connected.

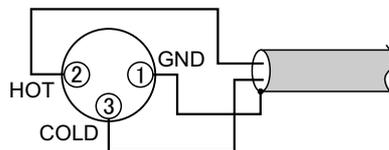
☆The OUTPUT-DIRECT terminals are always connected regardless of the OUTPUT SELECTOR position. It is recommended that the OUTPUT SELECTOR is set to OFF when using the OUTPUT-DIRECT terminals.

⑤ OUTPUT 1 & OUTPUT 2 terminals

By operating the OUTPUT SELECTOR knob, the unbalance output terminals, OUTPUT 1 & 2, of RCA pin-connector can be selected independently, or be turned off.

Note

The RCA-XLR plug of accessories should be used only for the case that the input terminals of next equipment are XLR type. Pin assignment is as follows: pin-1: GND, pin-2: HOT and pin-3: COLD.



Pin assignment of some power amplifier may be assigned as follows: pin-1: GND, pin-2: COLD and pin-3: HOT. In this condition, the output signal is reproduced in the opposite phase of the input signal. To play it in the proper phase, exchange wirings of 2-pin and 3-pin at one end of balance cable before connecting the XLR connector.

⑥ OUTPUT-REC terminals

The audio signals having skipped the volume control circuit to be outputted from these terminals can be connected to external equipment such as recording equipment; however, the volume of them cannot be controlled.

⑦ GND terminal

This is a ground reference point for audio signals.

Note

Avoid connecting the ground through this terminal to equipment connected through RCA pin connector or XLR connector, or the audio quality can be deteriorated because of forming a ground loop among some equipment.

Utilize this terminal to connect the ground of equipment separated from audio signal such as the motor of analog player, chassis of MC step-up transformer or earth ground as necessary.

⑧ INPUT-DIRECT terminals

The audio signals to be inputted to these terminals pass through the shortest path of this equipment because they skip the INPUT SELECTOR; however, these terminals should be used only for the case that only one audio source is connected.

☆The INPUT-DIRECT terminals are always connected regardless of the INPUT SELECTOR position.

It is recommended that the other INPUT terminals are not connected or that the INPUT SELECTOR is set to the number of the terminals not connected, when using the INPUT-DIRECT terminals.

⑨ INPUT terminals

Output terminals of audio equipment such as CD player, Phono amplifier and tuner can be connected to these INPUT terminals.

The unbalance input terminals, INPUT 1 to 5, of RCA pin-connector can be selected from among the five sources.

Note

To insert the short pin plugs of accessories into the INPUT terminals not connected may protect from external noise and improve S/N ratio. The short pin plugs should be used only for INPUT 1 to 5 terminals.

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, contact the dealer.

Trouble	Causes	Measures
The sound is not heard.	<ul style="list-style-type: none"> ● Is the OUTPUT SELECTOR knob set to the OFF position? ● Are the short pin plugs inserted to the desired INPUT-DIRECT, OUTPUT-REC or OUTPUT-DIRECT terminals? ● Are the short pin plug inserted into the terminals selected by the INPUT SELECTOR when connected to the INPUT-DIRECT terminals? 	<ul style="list-style-type: none"> ● Set it properly. ● Select the INPUT terminals not connecting the short pin plug or remove the short pin plugs.
A popping noise is heard when turning the LEFT LEVEL or RIGHT LEVEL knob.	<ul style="list-style-type: none"> ● For a source having many low frequency components or for volume change of large steps (in the region lower than 8:00 direction), a popping noise may be heard from the speakers by operating the MASTER VOLUME knob. However, this phenomenon is not failure and the noise can occur because of being switched to the attenuation grade which is changed by the high precision rotary switch volume control system. 	

Specifications

Product	Hybrid passive attenuator
Input impedance	47k ohm or more
Channel separation	100dB or more (20Hz to 20kHz)
Frequency response	10Hz to 70kHz (+0, -3dB)
Output impedance	250 ohm or less
Input/Output terminals	Terminals supplied by WBT
Dimensions (mm)	310 (width) x 86 (height) x 245 (depth)
Weight	5kg

Accessories: Six Short pin plugs , Two RCA-XLR plugs

- The appearance and specifications of this product are subject to change without notice in order to improve it.

Phasemation

Kyodo Denshi Engineering Co., Ltd.

4900-1 Ikebe-cho, Tsuzuki-ku, Yokohama-shi 224-0053

TEL 81-45-934-5234

FAX 81-45-934-7576

E-mail info@phasemation.com

URL <http://phasemation.com>

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