

Luxman

VACUUM TUBE STEREO POWER AMPLIFIER

MQ-88uC

Owner's Manual

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Installation place

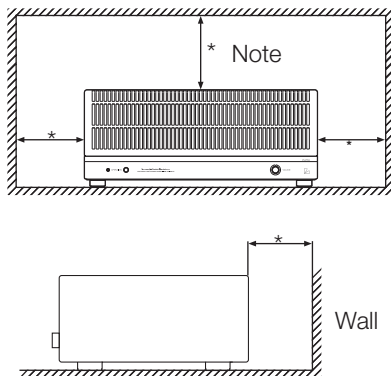
Install this unit in a location where good ventilation and heat radiation are assured. Especially, installation of this unit where direct sunlight is present, where the temperature rises excessively high such as close to a heater, or where it is humid or dusty may cause a malfunction even if heat is efficiently released. Therefore, do not install this unit in such places.

Ventilation holes

The ventilation holes on the top and bottom boards of this product must not be blocked because this unit is a vacuum tube amplifier and generates considerable heat. If the amplifier is installed on a rack or the like, secure ample space for cooling and leave the door open. Do not pile up other things on the amplifier and never put articles on it. Failure to observe this may cause a malfunction.

Note:

For heat dispersal, do not install this equipment in a confined space such as a book case or similar unit.



Precautions in connecting with other components

When connecting this product to input devices such as a control amplifier, be sure to turn off the power of this product and all other connected devices. Otherwise, a very strong noise may be generated and destroy the speakers. In the worst case, this can cause equipment malfunction.

The pin-plug to be inserted in each input terminal of this unit shall be pushed in firmly. If the grounding terminal is inadequately connected, noises including hum may be generated, resulting in an adverse S/N ratio.

Cautions in connecting speakers

When making speaker system connections, be sure not to cause short-circuiting between \oplus and \ominus of the speaker terminals and speaker input terminals of this unit. If signals are applied to the amplifier with its circuit left short-circuited, a large current may be carried in the output circuit and cause malfunctioning.

The sound is not generated shortly after the power supply is turned on.

This product is a vacuum tube amplifier, and therefore, it cannot deliver a sound until the vacuum tube heaters warm up. You can enjoy music 1 minute or more after turning on the power. We therefore advise initially setting the volume control at a low level. After that, you may move the volume control to your favorite sound level after the initial sound comes out of the speakers.

Repair and adjustment

When repairs and adjustments are needed, please consult with the dealer where you bought the unit.

Cleaning

For cleaning, use a piece of soft cloth to wipe the unit such as cleaning cloth. When the dirt is hard to remove, use a small amount of neutral detergent to wipe, and then wipe the unit with dry cloth. Do not use a solvent like benzine or thinner because such a substance can damage the exterior.

Safety caution

Caution

This unit is heavy. Be careful when unpacking, carrying, and installation.

This unit is a vacuum tube control amplifier. In the state of the unit in operation, the main body gets hot. Be careful not to touch it with your bare skin. For safety, do not use this product in a place where children or unchained animals are present.

Features of This Unit

Design of using vacuum tubes for all amplification circuits

All the amplification circuits consist of vacuum tubes (ECC83S x 2 pieces, ECC82 x 2 pieces, and KT88 x 4 pieces) that are manufactured by JJ Electronic in Slovak Republic.

Necessary and sufficient rated output

The rated output of 25 W+25 W (at the load of 4, 8, and 16 Ω) that enables necessary and sufficient sound volume in various speaker environments.

Output tube, KT88

KT88 manufactured by JJ Electronic in Slovak Republic is used in the push-pull structure as an output tube, which has the reputation of powerful and thick tone quality.

Parallelized first stage

The amplifier on the first stage has been parallelized and directly connected to the driver stage with a high S/N ratio and low-impedance transmission.

Triode connection

The proven Mullard type circuit (for the driver stage) has been equipped, and KT88, an output tube, has been used in a way of triode connection.

Impedance matching

Speaker terminals dedicated for 4, 8, and 16 Ω are equipped, which can be used according to the impedance of the speakers to be used.

Old-time parts layout

This product has a parts layout inspired by the design of old-time masterpiece, MQ60.

Monocoque chassis structure

This product features a monocoque chassis structure that is orthodox and has been proven.

OY-15 output transformer

The OY-15 output transformer contained in an aluminum die casting case has been revived in an original shape.

Large-capacity power transformer

An EI-type large-capacity power transformer is used to obtain persistent tone quality.

LUXMAN's original block capacitor

LUXMAN's original large-sized block capacitor is used to supply stable power.

2-line input

There are two lines of inputs for input terminals; one is a variable input capable of sound volume adjustment, and the other is a direct input to bypass the volume.



Bonnet for vacuum tube

A mesh type bonnet is supplied as a standard item to protect vacuum tubes and other large-sized parts.

Custom-made parts

LUXMAN's original custom-made parts for generating high sound quality are plentifully equipped.

Wide pitch RCA terminals

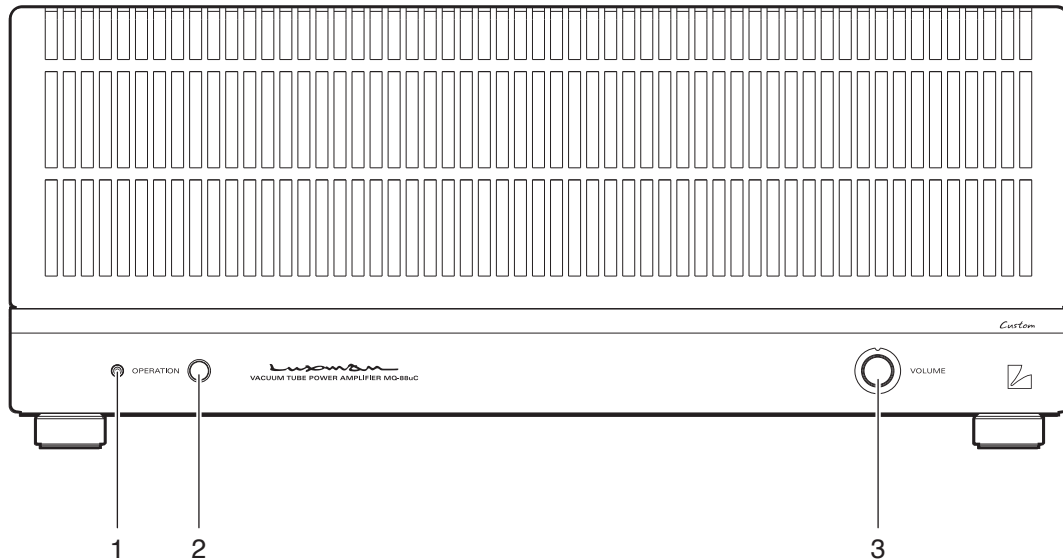
Wide pitch RCA terminals are used to allow large-sized RCA cables to be connected.

Highly reliable design

Prolonged life and highly reliable design have been achieved by providing operating conditions of vacuum tubes with some allowance.

Names and Functions

Front panel



1. Operation indicator (OPERATION)

Turns orange when the power is turned on.

2. Operation switch (OPERATION)

Toggles the power on and off.

When wiring or connection is performed, be sure to turn off this switch. When turning on the power switch again after turning the unit off, wait for more than one minute.

When the power is turned off, the OPERATION indicator will stay on for a while, but it is not a malfunction.

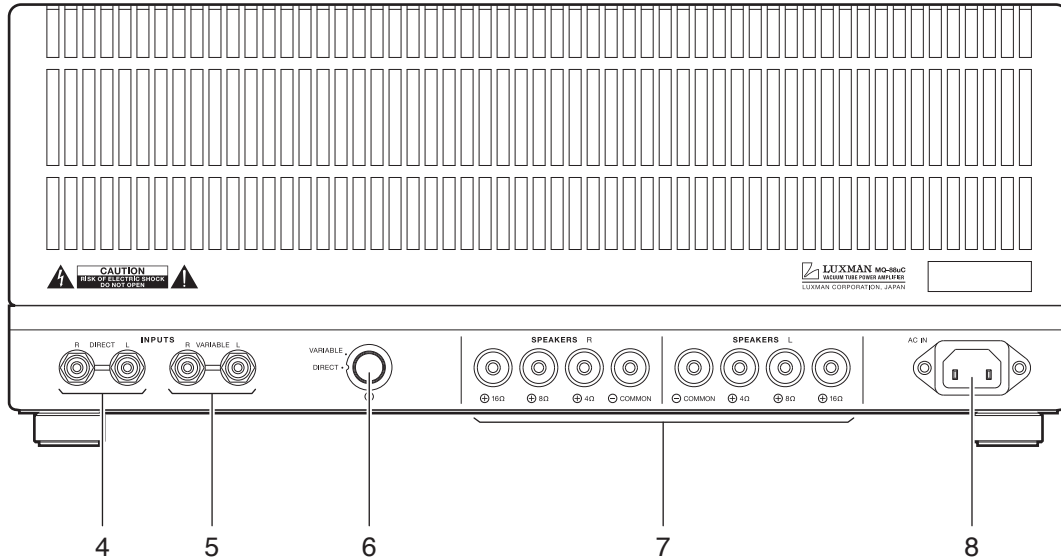
3. Volume control (VOLUME)

This function is effective only when a source component such as a CD player is connected to the VARIABLE input of this unit to adjust the input level.

When the connection is made with the direct input (DIRECT), the signals do not go through this volume thus the sound volume does not change.

When the DIRECT input is connected, please take extra care for the volume of the other connected unit.

Rear panel



4. Direct input terminals (DIRECT)

Connects to a control amplifier or a source component. When connected to this input terminal, the signals do not go through the volume circuit, thus rotating the volume control on the front panel will not change the volume.

5. Variable input terminals (VARIABLE)

Connects to a source component, e.g. a CD player without output level control. The sound volume can be adjusted by the volume control of the front panel.

If using a control amplifier with high output impedance in combination with this unit, use of the connection cable as short as possible is recommended to avoid unnecessary treble attenuation.

6. Input selector (VARIABLE/DIRECT)

Variable or direct input can be switched. Select the name of the terminals connected to the device to play back by operating this switch.

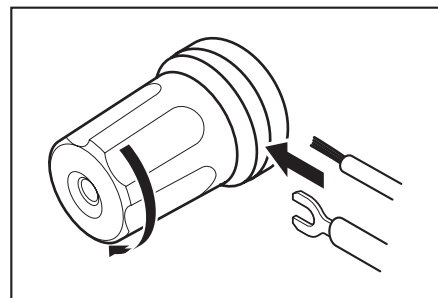
When switching the input, be sure to turn off the power. If the power is on while switching, large noise might be generated.

7. Speaker terminals (SPEAKERS)

These terminals are output terminals to connect a speaker system.

The right speaker terminals shall be connected to the R side, and the left speaker terminals shall be connected to the L side in consideration of the polarity \oplus and \ominus .

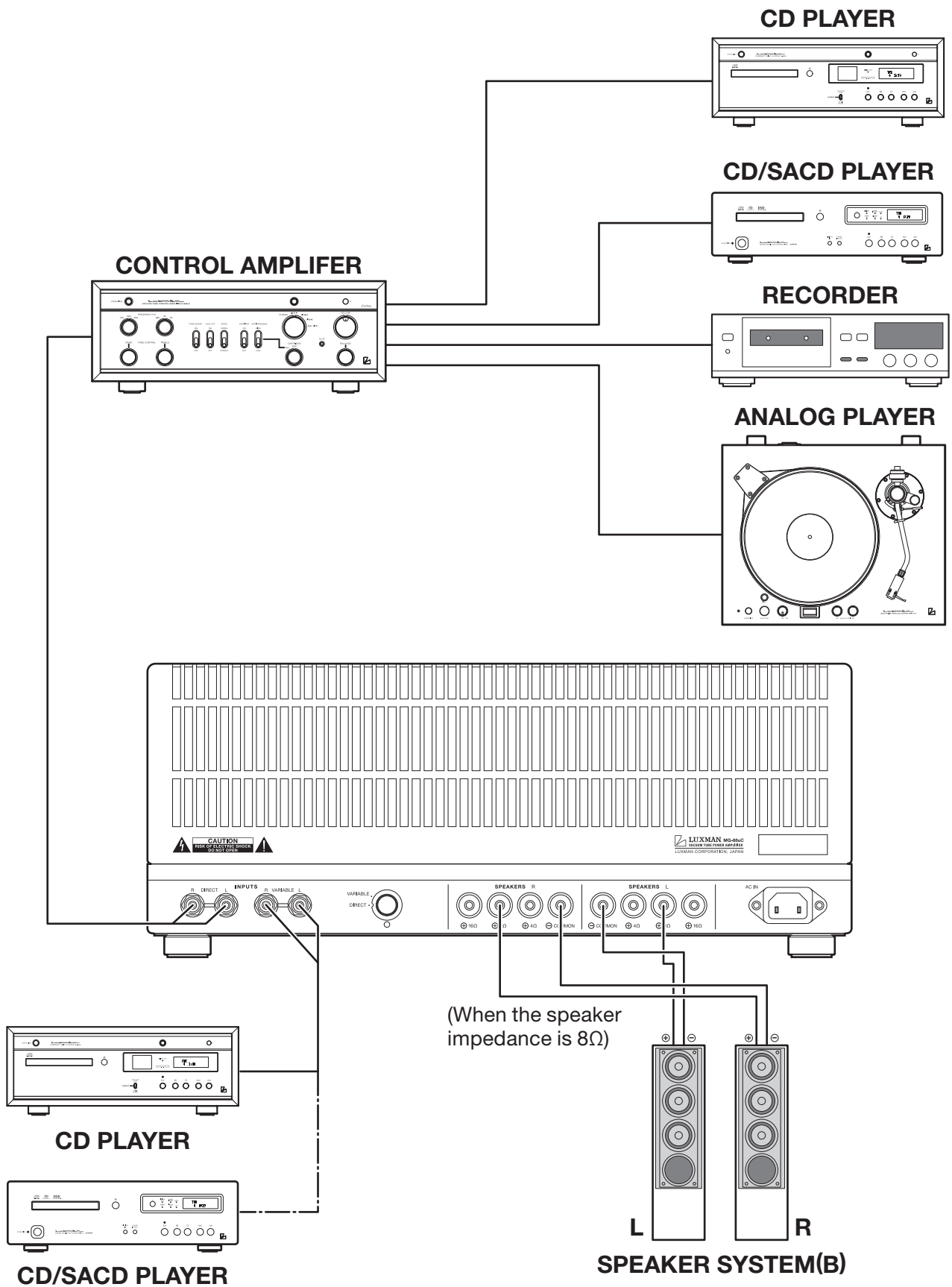
The speaker terminals consist of \ominus COMMON, \oplus 4 Ω , \oplus 8 Ω , and \oplus 16 Ω for each channel. Connect the \ominus terminal of the speaker system to the \ominus COMMON terminal and \oplus terminal of the speaker system to \oplus 4 Ω , \oplus 8 Ω , or \oplus 16 Ω according to the impedance of the speakers to be used.



8. AC inlet (AC IN)

Connects the accessory power cable. The power shall be supplied from a household wall socket.

Connections



Before connecting

Before connecting other devices, connect the jack side of the accessory power cable to the AC inlet of this unit.

Before connection is made, turn off the main power switch of this unit and the power of all other connected devices to prevent accidents due to noises generated unexpectedly.

How to connect power supply

Use the accessory power cable and insert the AC plug in the outlet on the wall in the room where the unit is installed.

How to connect a CD player, control amplifier

Connect the output terminal of a control amplifier to the input terminal with 2 (R and L) pin-plug cables.

When using a source device with the volume adjusting function, such as a CD player, connect to the VARIABLE input terminal. When using a source device with the volume control, such as a control amplifier, connect to the DIRECT input terminal.

Select DIRECT or VARIABLE input with the input selector.

How to connect speakers

Connect the left-channel speaker to the SPEAKERS-L terminal of this unit and the right-channel speaker to the SPEAKERS-R terminal.

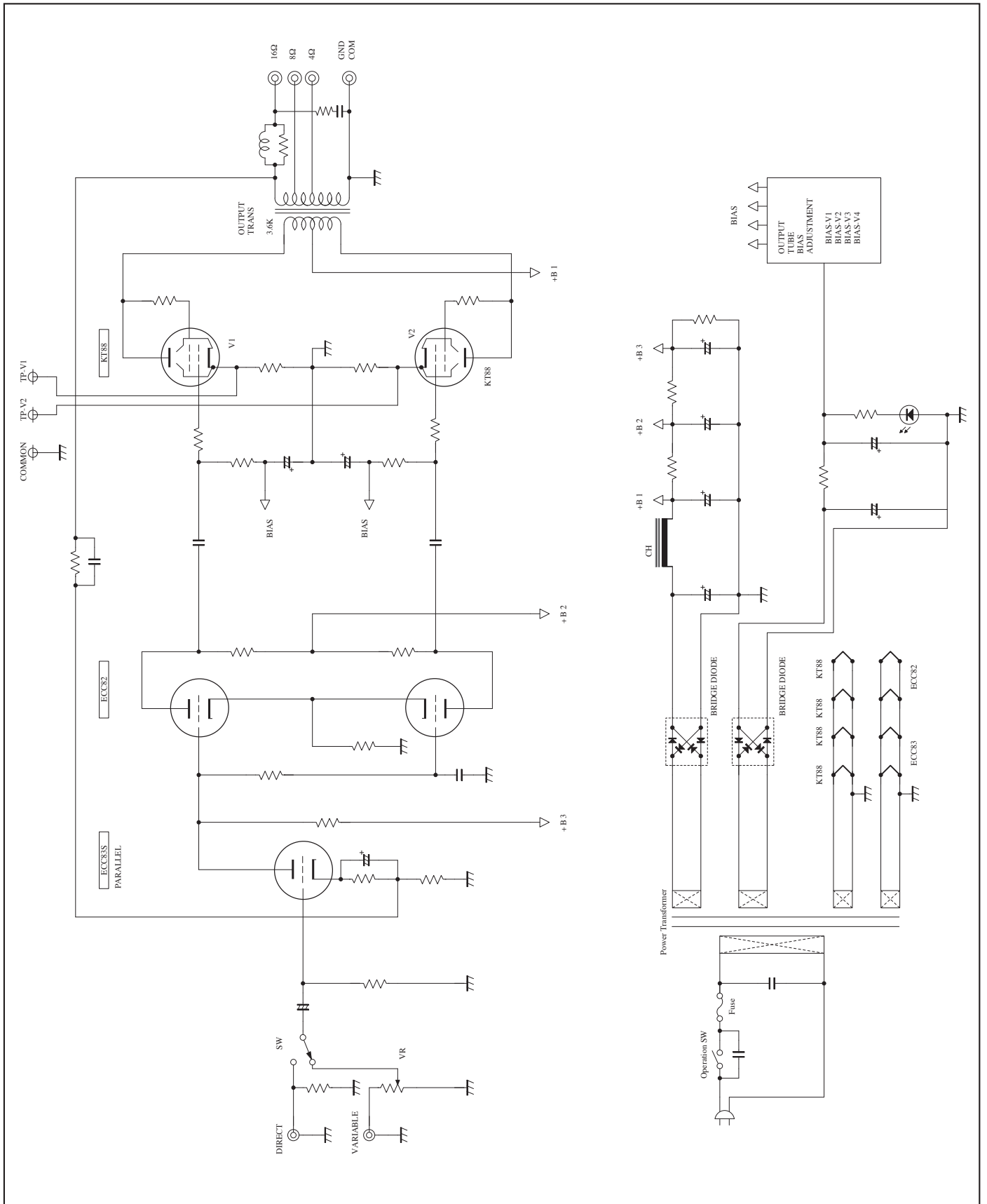
Securely connect the \oplus terminal of the speaker system to the red speaker terminal (\oplus 4 Ω , \oplus 8 Ω , or \oplus 16 Ω) of this unit according to the impedance of the speakers to be used and the \ominus terminal of the speaker system to the black speaker terminal (\ominus COMMON) of this unit.

If the \oplus or \ominus terminal is reversely connected to either of the right or left of the speaker system, the signal phases reproduced from the right and left of the speaker system are also reversed. In such a case, be aware that the sound level in the low range will be reduced and the acoustic stability will worsen, and thus the normal stereo playback is not achieved.

If the impedance of the speakers to be used is other than 4 Ω , 8 Ω , or 16 Ω , connect the terminal with an impedance closest to the impedance value of the speakers.

The range of the impedance of the speaker to be connected should be within the range of 4 Ω to 16 Ω .

Block Diagram



Specifications


VACUUM TUBE STEREO POWER AMPLIFIER MQ-88uC

Rated output	25 W+25 W (4 Ω, 8 Ω, 16 Ω)
Total harmonic distortion	0.1 % (1 kHz, 1 W) 0.5 % (20 Hz to 20 kHz, 1 W)
Input sensitivity	890 mV/25 W
Input impedance	32 kΩ
S/N ratio	105 dB (A weighted, input short)
Frequency response	20 Hz to 20 kHz (+0, -0.2 dB) 10 Hz to 100 kHz (+0, -3.0 dB)
Input	Line: Direct input x 1 line, variable input x 1 line
Output	Speaker terminal x 1 line (4, 8, and 16 Ω independent)
Supplied functions	[Front panel] Operation switch, Volume control [Rear panel] Input terminal, Input selector, Speaker terminal, AC inlet
Circuiting system	Mullard
Vacuum tube used	ECC83S x 2 pieces, ECC82 x 2 pieces, and KT88 x 4 pieces
Accessories	<ul style="list-style-type: none">• Power cable• Owner's Manual (This document)• Terminal protection cap• Safety cautions
Power source	230 V ~ (50 Hz)
Power consumption	170 W 140 W (no signal)
Max. external dimensions	440 (W) x 184 (H) x 230 (D) mm
Weight	16.1 kg (main unit)

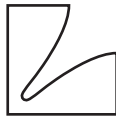
* Specifications and the appearance are subject to change without notice.

Before Asking for Repair Service

While in use, this unit may display phenomena which may be confused as malfunctions. Before contacting your country's official LUXMAN distributor for repair services, please read the operating instructions and operating instructions for any connected input and through output devices and check the troubleshooting table below. If the cause of the malfunction cannot be identified, please contact your dealer. After LUXMAN's representatives have accepted your request for repair services, inspection fees and transportation expenses may be claimed, even though the unit may be found to be operating normally.

Problem	Cause	Solution
No power is supplied even though the operation switch is pressed.	• The power plug is disconnected from the wall outlet, or it is not completely inserted.	• Insert the power plug in the wall outlet completely.
	• The power plug is disconnected from the AC inlet, or it is not inserted completely.	• Securely insert the power plug in the AC inlet.
No sound is generated. (for both left and right channels)	• The volume control is set at the minimum level.	• Rotate the volume control clockwise to adjust the sound volume.
	• The input switch is not set to the position of the source to be played back.	• Set the input switch to the position of the source to be played back.
	• Cable connections are incomplete.	• Make cable connections securely.
	• The output level of the input device is set to the minimum position.	• Adjust the output level.
No sound is generated on one side.	• The connecting cable is not connected on one side only.	• Make cable connections securely.
Humming sound (boon or zzz noise) is generated.	• The ground side of the pin-plug cable has no contact with the terminal.	• Make connections securely so that the ground side of the pin-plug cable can be connected.
	• The connecting cables are too close to the power cable.	• Keep the connecting cables away from the power cable.
	• Induction noise is picked up from a power transformer of another device.	• Install it distant from other devices.

MEMO



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AG00987E73A
Printed in Japan