

Owner's Manual

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Precautions

Installation place

This unit shall be installed in a well-ventilated and effectively heat-released place.

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.

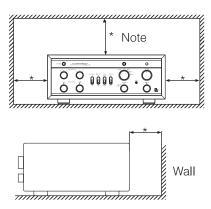
Ventilation holes

Do not block the top and bottom faces because this product is a heat-generating amplifier that contains vacuum tubes.

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. This can cause malfunctioning.

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 CD player, a Super Audio CD player, a tuner, and a recorder, be sure to turn off the power of this product and all other connected devices. Failure to observe this may generate a strong noise resulting in speaker damage or cause a malfunction.

The pin-plug to be inserted in each input terminal of this product 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.

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

This amplifier is equipped with a time muting circuit in order to separate the output circuit. Therefore, no sound is generated shortly after the power supply is turned on. If the volume control is moved to a high sound level before the time muting circuit is canceled, a large sound is suddenly generated. Please be advised that the volume control shall be set to a low level at first and adjusted after sound comes out of the speakers.

Batteries

Caution:

Batteries used for remote controller shall not be exposed to excessive heat such as sunshine, fire or the like.

Repair and adjustments

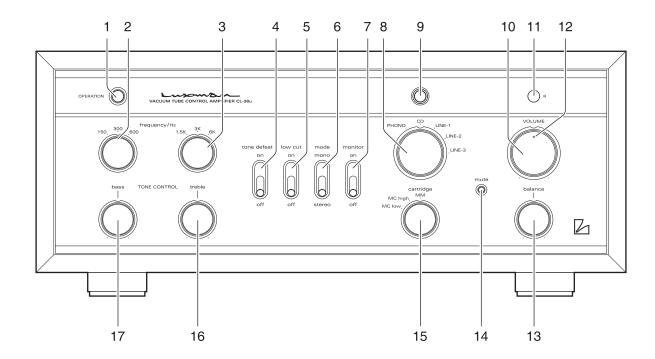
When repairs or adjustments are needed, please ask your dealer where you bought the product.

Cleaning

For cleaning, use a piece of soft cloth to wipe the product such as cleaning cloth available on the market. If the product has become remarkably dirty, remove the dirt with soft cloth absorbing a small amount of neutral detergent, and then wipe the unit with dry cloth.Do not use a solvent like benzine or thinner because such a substance can often damage the exterior.

Names and Functions





1. Operation switch (OPERATION)

Toggles the power on and off. When connection of the input/output terminals is performed, be sure to turn off this switch. When power is turned off and on again, put 1 minute or more between off and on.

2. Low frequency selector switch (frequency / Hz)

Toggles to select frequencies (150Hz, 300Hz, 600Hz), at which bass will be changed.

3. High frequency selector switch (frequently / Hz)

Toggles to select frequencies (1.5kHz, 3kHz, 6kHz), at which treble will be changed.

4. Bypass switch (tone defeat)

Toggles to bypass or activate tone controls.

off: Setting the switch to this position activates the tone controls and enables the user to adjust preferred tonal balance.

on: Setting the switch to this position bypasses the tone control circuit.

5. Low cut switch (low cut)

Toggles low frequency cutoff function on and off.

off: Provides normal state.

on: Cuts frequencies below 30Hz at a -6dB/octave slope.

6. Stereo / Mono mode selection (mode) Changes the output mode.

mono: Mixes signal from right and left channels.

stereo: Provides normal stereophonic reproduction.

7. Monitor switch (monitor)

Reproduces the data from the recorder on the monitor.

Selecting ON enables to reproduce the data from the recorder.

Selecting OFF enables to reproduce the data from the source selected with the input selector.

8. Input selector

Selects an input device such as a CD/DVD player or a tuner connected to each input terminal.

This selector has 5 positions consisting of PHONO, CD, LINE-1, LINE-2, and LINE-3 that correspond to each input terminal on the rear panel. To select an input source, set the indicator to the position of the source to be reproduced.

9. Pilot light

Turns orange when the power is turned on.

Names and Functions

10. Volume control (VOLUME)

Adjusts the sound volume.

Sound is not generated when this control is rotated counterclockwise to the end. The sound volume gradually becomes higher as the control is rotated clockwise.

11. Remote control photo receiver (R)

Receives signals from the accessory remote control. Do not block the front of the photo receiver.

12. Sound volume indicator

Indicates the sound volume level.

This indicator blinks during the muting time immediately after turning on the power and at activating the mute function using the main unit or remote control.

13.Balance (balance)

Adjusts the balance of sound volume between right and left channels.

Rotating this switch counterclockwise causes the left sound volume to be enhanced, and rotating the switch clockwise causes the right sound volume to be enhanced. This switch shall be set to the center position under normal conditions and rotated to make adjustment if necessary.

14. Mute button (mute)

Temporarily mutes the sound. Pressing this button activates the mute function and blinks the sound volume indicator resulting in no sound generated. Pressing this button again to cancel the mute function allows sound to be generated.

15. Cartridge selector (cartridge)

Adjusting the input impedance of the amplifier may be required depending on the impedance of the cartridge to be used. The input impedance of the amplifier is selectable with the cartridge selector.

The selectable positions are MM, MC high, and MC low.

Select a position in accordance with the input impedance specified in the operating instructions of the cartridge or your taste.

Cartridge selector

Cartridge Selector	MM	MC high	MC low
Impedance	47kΩ	100Ω	30Ω

16. Tone control for treble (treble)

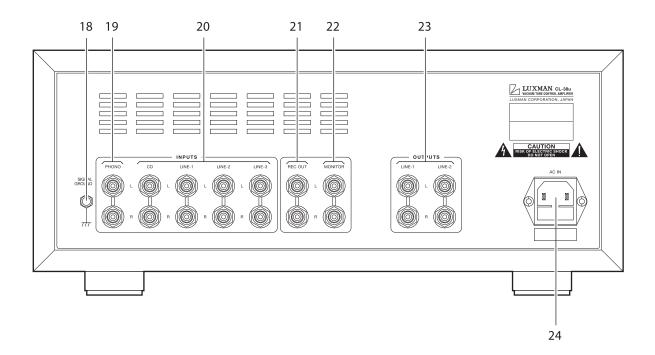
Controls the characteristics in the high frequency range. When this switch is set to the center position, flat frequency characteristic is obtained. Rotating the switch clockwise causes the high-frequency range to be enhanced, and rotating the switch counterclockwise causes the high frequency range to be attenuated.

17. Tone control for bass (bass)

Controls the characteristics in the low frequency range. When this switch is set to the center position, flat frequency characteristic is obtained. Rotating the switch clockwise causes the low-frequency range to be enhanced, and rotating the switch counterclockwise causes the low frequency range to be attenuated.

Names and Functions





18. Signal ground terminal (SIGNAL GROUND)

Is a ground terminal for devices to be connected to this unit. This terminal is used to reduce noise when other devices are connected, and is connected to an analog player or a tone arm. This terminal is designed not for safety.

19. Phono input terminals (PHONO)

Are used as an input terminal to connect an RCA pinplug cable from an analog player or a tone arm.

20.Line input terminals (CD, LINE-1, LINE-2, LINE-3)

Are used for high-level signal inputs from a CD/DVD player, a SACD player, a tuner, a video deck, a TV, and other such devices. These input terminals offer the same functions.

21.Record output terminals (REC OUT)

Are used to transmit output signals for recording onto the recorder. These terminals are connected to the line input terminal of the recorder.

22. Recorder input terminals (MONITOR)

Are used to reproduce the line output of the recorder. These terminals are connected to the output terminals of the recorder.

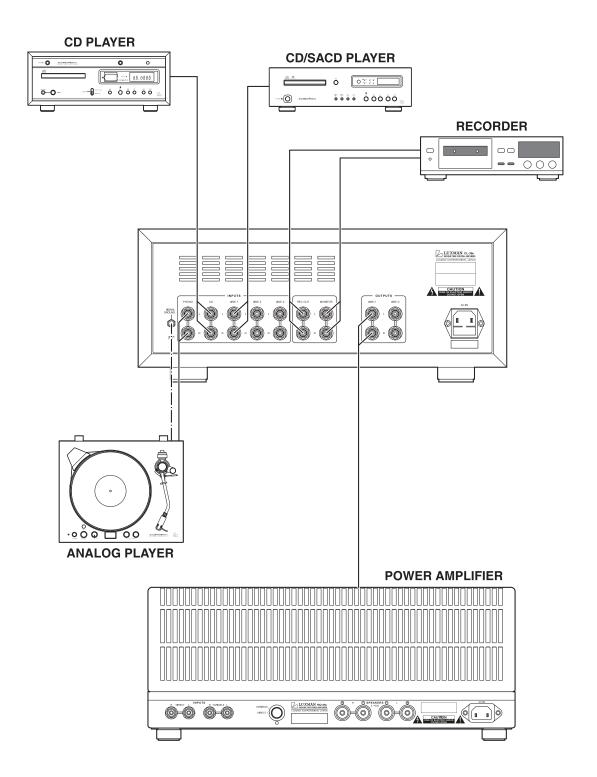
23. Line output terminals (LINE-1, LINE-2)

Connects to power amplifier. These terminals are of parallel connection so that two power amplifiers can be used for bi-amplification.

24.AC inlet (AC IN)

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

Connections



Connections



Before connections

Before connecting other devices, connect of the accessory power cables to the AC inlets of CL-38u control amplifier. When connection is performed, turn off the operation switches of these units and all other connected devices to prevent an accident caused by unexpected noise.

How to connect power supply

Use the accessory power cables and insert the AC plugs in outlets on the wall in the room where the unit will be installed.

How to connect CD player, DVD player, tuner, or other devices

Connect the output terminal of a reproducing device such as a CD player and the line input terminal (CD, LINE-1, LINE-2, or LINE-3) of the CL-38u control amplifier with 2 (R and L) pin-plug cables. Use caution not to conduct wrong connection between right and left.

How to connect analog record player

Connect between the output terminal of the analog record player and the PHONO terminal of this unit with 2 (R and L) pin-plug cables. For some types of players, the ground wire from the phono motor or tone arm should be connected to the signal ground terminal of this unit. The output from an analog record player equipped with a phono equalizer or from an independent phono equalizer shall be connected to the line input terminal (CD, LINE-1, LINE-2, or LINE-3) of this unit.

How to connect recorder

1. Connection to MONITOR terminal (playing)

Connect between the line output terminals (LINE OUT) of a recorder and the MONITOR terminals of this unit with pin-plug cables in consideration of R and L.

2. Connection to REC OUT terminal (recording)

When the sound source from the various input devices is reproduced, which are connected to the PHONO or LINE terminals of this unit, setting the input selector to the source to be recorded allows users to provide the REC OUT terminal with the signal.

Connection between the REC OUT terminal of this unit and the line input terminals (LINE IN) of the recorder with pin-plug cables is required for recording on the recorder. After connection, you can enjoy listening to the sound from the speaker system and record the sound at the same time. These output signals for recording are not affected by the control functions such as the volume control and tone control functions. When you need not toggle an input source to be recorded (especially when a recorder connected to the recorder output terminals is recording), do not operate this switch.

Operations

Before operation

Ensure that the connections are correctly performed. (Normal playback cannot be achieved with wrong connection of R and L)

When the power is toggled between on and off or the input selector is changed over, set the volume control to the minimum position in advance.

Playback procedures

Press the operation switch after ensuring that the volume control is set to the minimum position.

Select a source to be reproduced with the input selector.

Adjust the sound level with the volume control.

Operate the tone defeat switch, balance control, or tone control according to the reproduced source.

How to operate tone defeat

The tone defeat switch is used to play sound with the shortest signaling route for enhancing the purity of the source selected with the input selector.

When this switch is set to on, the tone control are bypassed.

How to operate balance control

The balance control allows users to adjust the balance of sound volume between right and left channels.

When balance adjustment is not required, the balance control is set to the center position.

How to operate the tone control

This unit has the tone control function for the lowfrequency and high-frequency ranges.

The low-frequency range type works in the 150Hz, 300 Hz or 600Hz.

The tone control is set to flat frequency characteristic at the center position. Rotating the control clockwise causes the low-frequency range to be enhanced, and rotating the control counterclockwise causes the low-frequency range to be attenuated.

The high-frequency range type works in the 1.5kHz, 3kHz or 6kHz. As with the low-frequency range type, the tone control is set to flat frequency characteristic at the center position.

Rotating the control clockwise causes the high-frequency range to be enhanced, and rotating the control counterclockwise causes the high-frequency range to be attenuated.

For both the low-frequency and high-frequency ranges, the right and left channels have an interlocking function.

When the tone defeat switch is set to on, the tone control does not function.

How to record a source

- 1. Select a source to be recorded with the input selector.
- 2. Play the source to be recorded and set the recorder to the recording state.

Operation of the tone control or balance control does not affect the recording signals.

Safety cautions



Caution

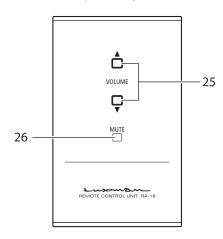


This unit is a vacuum tube control amplifier. Be careful not to touch this product with your bare hand because this product becomes hot in the poweron state. For safety, do not use this product in a place where children or unchained animals are present.

How to Use Remote Control



Remote control (RA-18)



25. Volume (VOLUME, ▲, ▼)

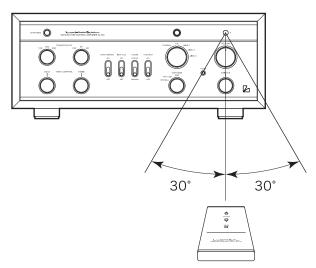
Adjusts the sound volume of the pre-amplifier. Pressing ∇ or \triangle decreases or increases the sound volume, respectively.

26. Mute (MUTE)

Temporarily mutes the sound. Activation of the mute function causes the volume indicator on the main unit to blink, and no sound is generated. Pressing this button again to cancel the mute function allows sound to be generated.

Remote control

The remote control shall be aimed at the remote sensor of this unit within the specified angle range shown in the illustration when used.

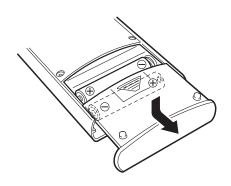


Effective distance: approx. 5 m

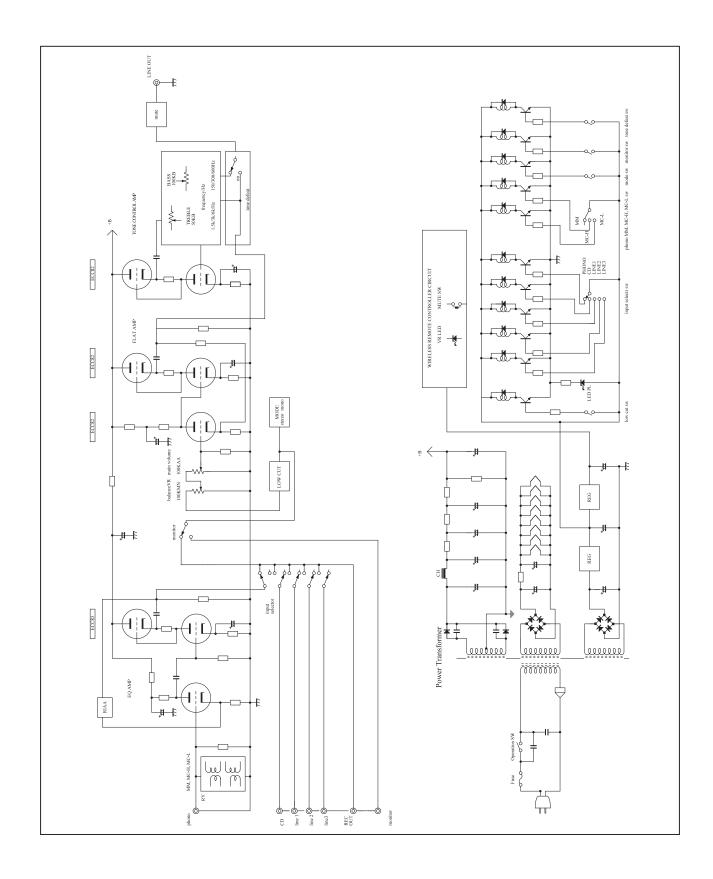
Dry cell battery

[How to load batteries]

- 1. Put your finger on the battery cover claw located behind the remote control. The battery cover can be opened by sliding it downwards.
- 2. Put 2 AAA batteries in the battery case as shown in the illustration.
- 3. Close the battery cover.



- * When the batteries start to lose power, the effective distance becomes shorter or the unit does not function even though the switch is pressed. In such a case, both of the batteries shall be replaced with new ones at the same time.
- * If the remote control is not used for a long time, the batteries shall be removed from the case.



Specifications



Total Harmonic Distortion	0.006% (1kHz, 1V / 50kΩ)			
	0.06% (20Hz ~ 20kHz, 1V / 50kΩ)			
Input Sensitivity / Impedance	PHONO (MM)	: 2.0mV / 47kΩ		
	PHONO (MC-high)	: 0.3mV / 100Ω		
	PHONO (MC-low)	: 0.08mV / 30Ω		
	LINE	: 190mV / 50kΩ		
	RECORDER	: 190mV / 50kΩ		
Maximum Output Voltage / Impedance	LINE-OUT	: 19V (T.H.D.0.1% / 50kΩ)		
S/N Ratio	PHONO (MM)	: >68dB (IHF, A-weighted)		
	PHONO (MC-high)	: >63dB (IHF, A-weighted)		
	PHONO (MC-low)	: >60dB (IHF, A-weighted)		
	LINE	: >100dB (IHF, A-weighted, Input shorted)		
Frequency Response	PHONO (MM)	: 20Hz - 20,000Hz (±0.5dB)		
	PHONO (MC-high)	: 20Hz - 20,000Hz (±0.5dB)		
	PHONO (MC-low)	: 20Hz - 20,000Hz (±0.5dB)		
	LINE	: 10Hz - 70,000Hz (-3dB)		
Tone Controls	BASS (150Hz)	: ±8.0dB at 50Hz		
	BASS (300Hz)	: ±8.0dB at 100Hz		
	BASS (600Hz)	: ±8.0dB at 200Hz		
	TREBLE (1.5kHz)	: ±8.0dB at 5kHz		
	TREBLE (3kHz)	: ±8.0dB at 10kHz		
	TREBLE (6kHz)	: ±8.0dB at 20kHz		
Low Cut	30Hz (-6dB / oct.)			
Inputs	1 Phono (MM / MC high / MC low supported) and 4 Lines			
Recorder Input / Output	Rec Output x 1			
	Monitor Input x 1			
Outputs	LINE 1, LINE 2			
Circuit	SRPP	SRPP		
Vacuum Tubes Used	3 x ECC83, 5 x ECC82			
Accessories	Remote Control, Power Cable, Terminal Protection Cap,			
	Owner's Manual, Safety Cautions, Batteries			
Power Supply Voltage	230V ~ 50Hz			
Power Consumption	35W			
Dimensions (W × H × D)	400 × 169 × 307 (mm)			
Weight	13.5kg			

^{*}Specifications and appearance are subject to change without notice.

Troubleshooting

While the unit is used, an unusual phenomenon may be confused as a malfunction for a certain reason. Prior to asking us for repair services, please check the table below and read the instruction manual for the subsidiary devices. If the cause of the malfunction cannot be identified, please contact your dealer.

Problem	Cause	Solution
No power is supplied even though the operation switch is pressed ON.	The power plug is disconnected from the wall outlet, or it is not completely inserted.	Insert the power plug in the wall outlet securely.
	The power plug is disconnected from the AC inlet, or it is not inserted completely.	 Insert the power plug in the wall outlet securely.
No sound is generated.	The volume control is set to the minimum level.	 Rotate the volume control clockwise to adjust the sound volume.
	The input selector is not set in the playback source position.	Set the input selector in the playback source position.
	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 comes out on one side.	The balance control is fully rotated.	The balance control shall be set to the center position under normal conditions.
	The connecting cable is 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 makes contact with the terminal.
	The ground wire of the record player is not connected.	 Connect the ground wire of the record player to the SIGNAL GND terminal.
	 Connections or mounting conditions are incomplete between the cartridge and shell, or between the shell and tone arm of the record player. 	Connect (or mount) the cartridge, shell, and tone arm securely.
No effect of tone control is observed.	The tone defeat switch is turned on.	When tone control is used, the tone defeat switch shall be set to off.



