

Luxman

INTEGRATED AMPLIFIER

L-505u

Owner's Manual

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Installation place

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

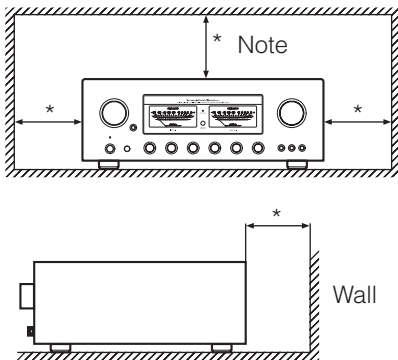
Especially, installation of this unit where direct sunlight is present, where the temperature rises excessively high such as close to a heater, or where it is humid or dusty may cause a malfunction even if heat is efficiently released. Therefore, do not install this unit in such places.

Ventilation holes

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 unit to input devices such as a CD/DVD player, a tuner, and a recorder, be sure to turn off the power of this unit 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 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, exercise extra care not to short-circuit between \oplus and \ominus of the speaker terminals and speaker input terminals of this unit. If a large signal is applied to the amplifier with its circuit left short-circuited, a large current may be passed through the output circuit and cause a malfunction.

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.

Protection circuit

This product is equipped with the protection circuit that is activated upon detection of overcurrent, abnormally high temperature, and DC drift to protect the amplifier and speakers. When the protection circuit is activated, the output to the speaker terminal is shut off and the standby indicator blinks to show that this unit is in the muting state. If the protection circuit is frequently activated after a lapse of a certain time and turning on the power again, please consult your dealer.

Batteries

Caution:

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

Repair and adjustment

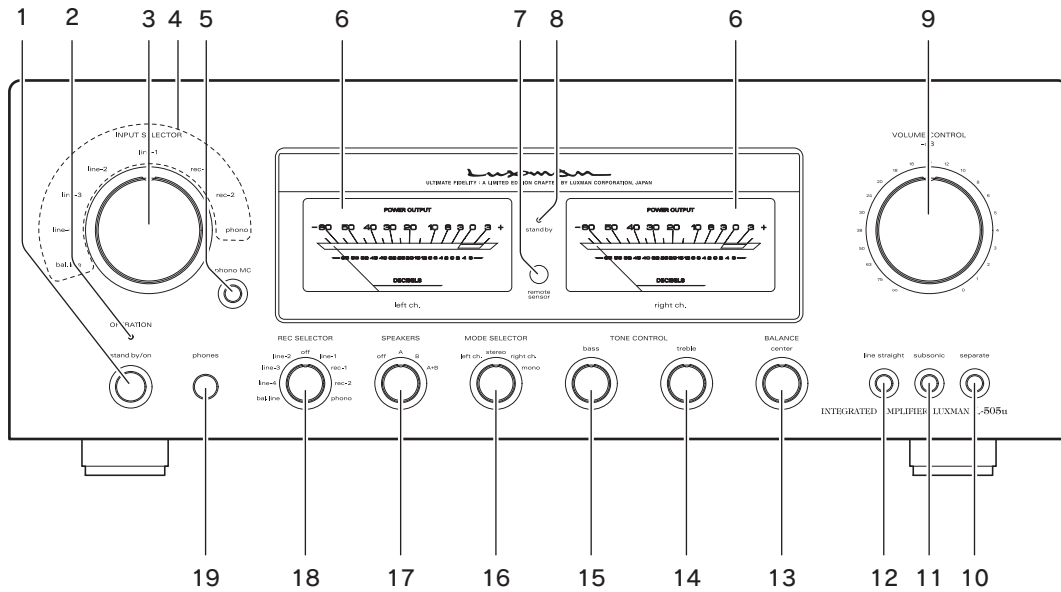
When repairs or adjustments are needed, please ask the dealer where you bought the unit.

Cleaning

For cleaning, use a piece of soft cloth to wipe the unit such as cleaning cloth available on the market. If the unit 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 damage the exterior.

Names and Functions

Front panel



1. Power switch (stand by/on)

Toggles the power on and off. When wiring or connection is performed, be sure to turn off this switch.

2. Operation indicator (OPERATION)

Blinks in the time muting mode when the power switch is turned on and lights up when the operation state is activated afterward. This indicator blinks when the unit is in the muting mode or when the volume is adjusted with the remote control.

3. Input selector (INPUT SELECTOR)

Selects an input device from the devices such as a CD/DVD player and tuner connected to each input terminal. The input selector has 8 positions consisting of bal., line-4, line-3, line-2, line-1, rec-1, rec-2, and phono that correspond to each input terminal on the rear panel. The knob is rotated to light the input indicator of the input device to be selected.

4. Input indicator

Lights up at the input device to be selected with the input selector or remote control.

5. Phono MC cartridge on/off switch (phono MC)

Changes the gain level of the equalizer amplifier (amplifier circuit required to play an analog record).

MC : ON is selected by pressing this switch when MC (moving coil) type cartridge of low output voltage is used.

Be aware that the sound volume becomes higher and unbalanced sound without high frequencies is generated owing to the impedance when "MC" is selected during use of the MM type cartridge.

MM : OFF is selected when MM (moving magnet) type cartridge of high output voltage is used.

6. Power meters

The left meter reads the output of the L channel, and the right meter reads the output of the R channel.

The meters read the level in decibels.

The meters light when the power is on.

7. Remote sensor (remote sensor)

Receives signals from the accessory remote control.

8. Standby indicator (stand by)

Lights when the AC plug is plugged into a wall socket and the power switch is set to off.


This indicator turns off when the AC plug is disconnected from the wall socket or the power switch is set to on. This indicator blinks when the protection circuit is activated.


9. Volume control (VOLUME CONTROL)

Adjusts the sound volume. Sound is not generated when this control is rotated counterclockwise to the end, and then, the sound volume gradually becomes higher when the control is slowly rotated clockwise.

10. Separate switch (separate)

Separates the pre-amplifier and main-amplifier each other.

 : Uses this unit as a normal pre-main amplifier.

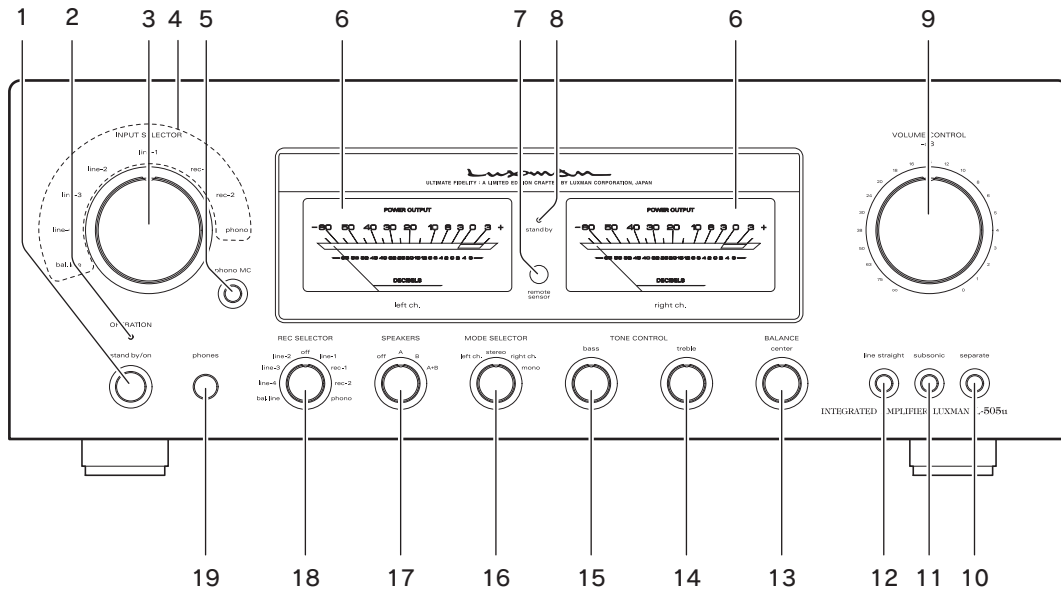
 : Feeds external signals from the MAIN IN terminal on the rear panel to the main-amplifier section.

When the separate switch is set to on, the volume control of this unit cannot adjust the volume of the speakers connected to this unit. Volume adjustment shall be performed at the input device side such as the control amplifier connected to the MAIN IN terminal.

Entry of direct output into the MAIN IN terminal from a CD/DVD player or other devices that cannot adjust sound volume constantly provides a full power state and accordingly results in the risk of speaker damage.

For such input devices, be sure to use a control amplifier equipped with sound volume adjustment function as a relay, generate sound through the speakers with volume lowered, and adjust the volume to your favorite level.

Front panel



11. Subsonic (subsonic)

Cuts ultra-low frequencies out of audible range to prevent ultra-low range noise from adversely affecting audible range. This function is significantly effective especially when a record is warped or a woofer is shaking owing to ultra-low range vibration.

- : Subsonic off
- : Subsonic on

12. Line straight (line straight)

Enhances the purity of the sound quality by bypassing the balance control circuit, tone control circuit, or the like.

- : Line straight off/bypass off
- : Line straight on/bypass on

When the line straight switch is set to on, the balance control and tone control cannot be adjusted and the mode selector does not function.

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.

When the line straight switch is set to on, this switch does not function.

14. Tone control for treble (TONE CONTROL, treble)

Controls the frequency 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.

When the line straight switch is set to on, this switch does not function.

15. Tone control for bass (TONE CONTROL, bass)

Controls the frequency 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.

When the line straight switch is set to on, this switch does not function.

16. Mode selector (MODE SELECTOR)

Changes the output mode.

stereo: Provides normal stereo-
(Center) phonic reproduction.

mono: Mixes the signals from right and left channels.

left ch: Reproduces the signals only from the left channel with use of both speakers.

right ch: Reproduces the signals only from the right channel with use of both speakers.

17. Speaker selector (SPEAKERS)

Selects either of 2 speaker systems, A or B, located at the rear panel.

off: Activates only headphones.
(Center) No sound is generated from any speakers.

A: Selects the A system speaker terminal.

B: Selects the B system speaker terminal.

A+B: Simultaneously activates both A and B system speakers. When both speaker terminals are simultaneously used, select speakers with impedance of 8 ohms or more because both output terminals are connected in parallel.

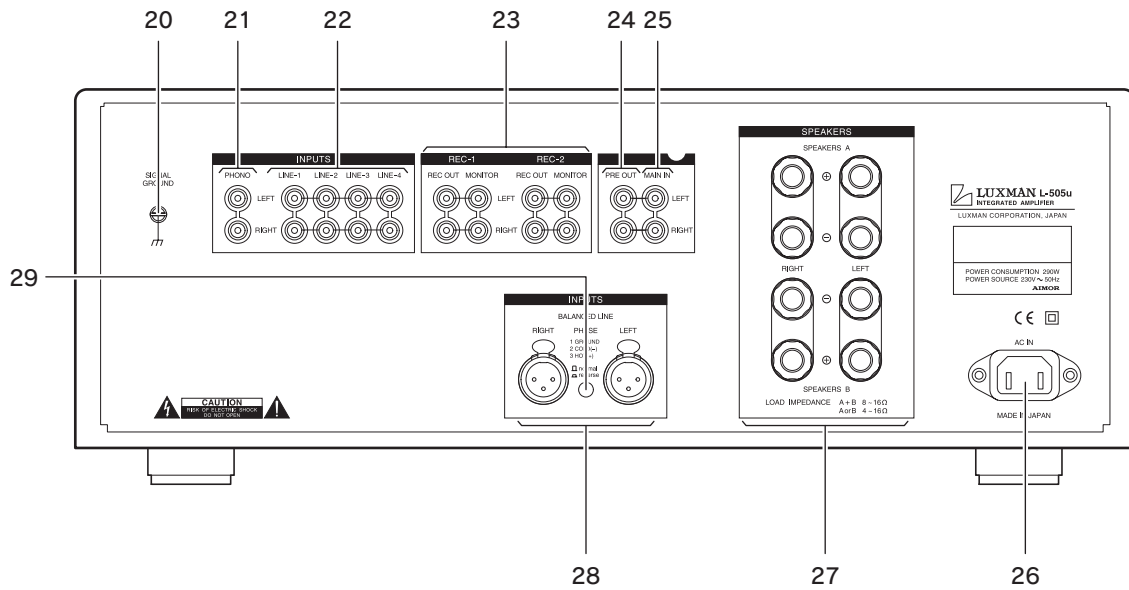
18. Recording selector (REC SELECTOR)

Selects an input source to be recorded and sends recording signals to the recorder connected to this unit.

19. Headphone jack (phones)

Is used to listen to sound with use of stereo headphones. Insert the headphone plug into this output jack. Even when the plug is inserted, signals to the speaker output terminal is not interrupted. Accordingly, to listen to sound with only use of headphones, set the speaker selector to off.

Rear panel



20. Signal ground (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. This terminal is designed not for safety.

21. Phono input terminal (PHONO)

Is an input terminal to connect an analog record player.

22. LINE-1, LINE-2, LINE-3, and LINE-4 input terminals (unbalance) (LINE-1, LINE-2, LINE-3, LINE-4)

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. The input sensitivity is 180 mV, and the impedance is 42 kohms. These input terminals offer the same functions.

23. Recorder input/output terminals (REC-1, REC-2)

Connects the audio input/output of a recorder. The audio input of a recorder is connected to REC OUT, and the audio output of a recorder is connected to MONITOR.

24. Pre-out terminal (PRE OUT)

Provides the output of the pre-amplifier section.

A bi-amp connection can be performed with a combination of an external power amplifier because this terminal always provides output regardless of the separate switch setting.

25. Main in terminal (MAIN IN)

Provides input to the main-amplifier section when the pre-amplifier and main-amplifier are separated.

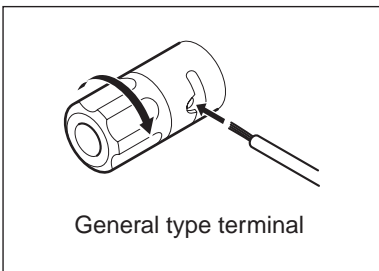
26. AC inlet (AC IN)

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

27. Speaker terminal (SPEAKERS)

Connects a speaker system.

The right speaker terminal shall be connected to the RIGHT side, and the left speaker terminal shall be connected to the LEFT side in consideration of the polarity.



28. LINE input terminals (balance) (BALANCED LINE)

Are the balance type input terminals of the LINE level for an XLR connector (Cannon connector).

29. Phase inverters (PHASE)

Changes the phase when the balance input terminal is used. The phase shall be corresponding to the phase of the input device.

Normal position

① GROUND

② COLD

③ HOT

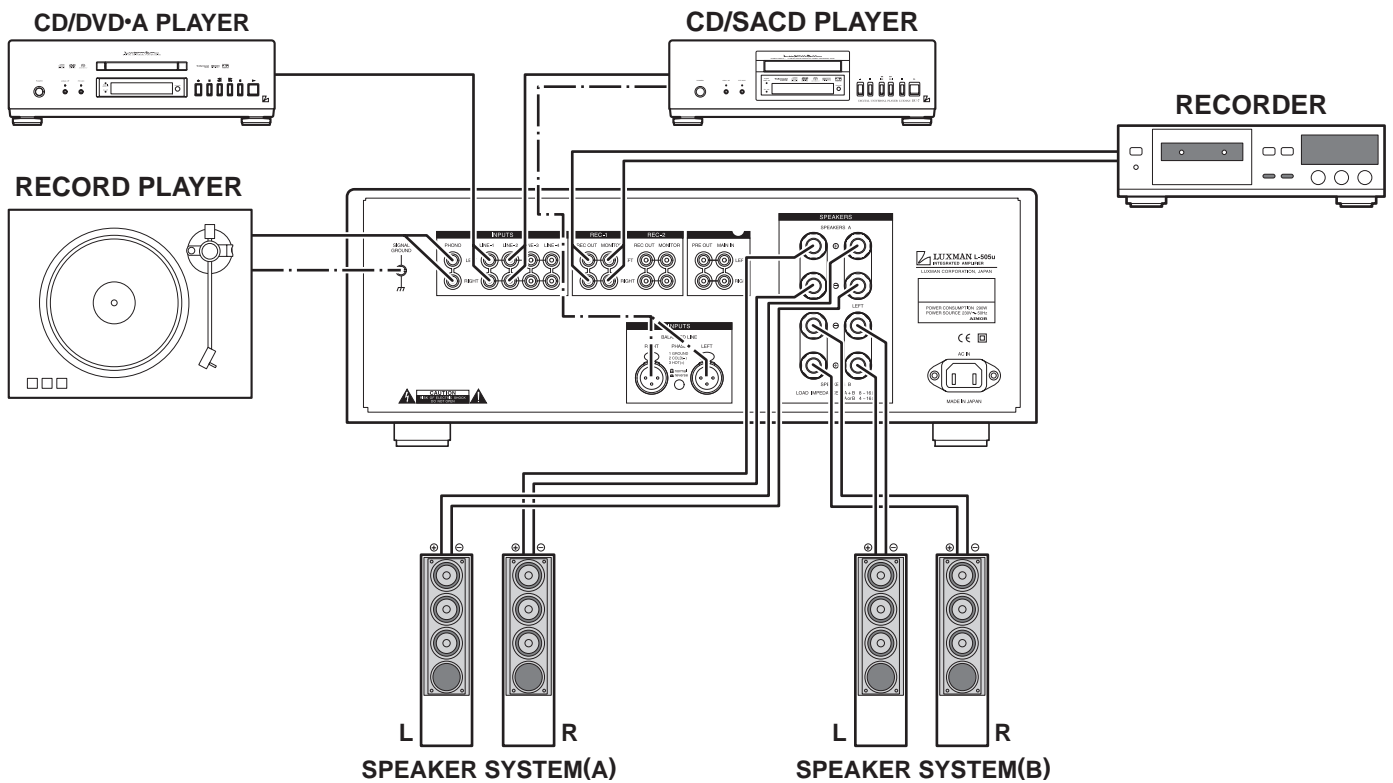
Reverse position

① GROUND

② HOT

③ COLD

Connections



How to connect power supply

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

How to connect CD/DVD audio device, SACD player, tuner, or other devices

Connect between the output terminals of a CD/DVD audio device, SACD player, tuner, or other such input devices and the LINE-1 input terminals of this unit with 2 (R and L) pin-plug cables or balanced cables. For LINE-2, LINE-3, and LINE-4 input terminals, connection in the same fashion as the LINE-1 terminals provides the reproduction likewise.

How to connect speakers

Connect the left-channel speaker to the LEFT SPEAKER terminal of this unit and the right-channel speaker to the RIGHT SPEAKER terminal.

Securely connect the \oplus terminal of the speaker system to the speaker terminal \oplus (red) of this unit, and the \ominus terminal of the speaker system to the speaker terminal \ominus (black) of this unit.

If the \oplus and \ominus terminals are reverse-connected to either of the right and left speaker systems, the acoustic phases of the sound reproduced from the right and left speaker systems 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, thus failing in normal stereo playback.

How to connect record player

Connect between the output terminal of an 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 the tone arm should be connected to the ground terminal of this unit.

The phono equalizer of this unit uses the MM or MC cartridge. If an MC cartridge with low output voltage is used, set the phono MC switch on the front panel to on.

The output from a record player equipped with a phono equalizer or from an independent phono equalizer shall be connected to the LINE input terminal 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. Now, setting the input selector to rec-1 or rec-2 provides playback.

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 recording selector to the source to be recorded allows users to provide the REC OUT terminal with the signal.

Connection between the REC OUT terminals 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 the 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.

How to connect PRE OUT /MAIN IN terminal

Either the pre-amplifier or main-amplifier can be separately used.

When the pre-amplifier or main-amplifier is separately used, set the separate switch on the front panel to on.

When only the pre-amplifier is used, connect the PRE OUT terminal of this unit to the input terminal of another power-amplifier, and when only the main-amplifier is used, connect the MAIN IN terminal of this unit to the output terminal of another power-amplifier.

When this amplifier is used without separating between pre-amplifier and main-amplifier, set the separate switch on the front panel to off, or no sound is generated.

Before operations

1. Ensure that the connections are correctly performed. (Normal playback cannot be achieved with wrong connection of R, L, +, or -.)
2. 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 procedure

1. Press the power switch after ensuring that the volume control is set to the minimum position.
2. Select a source to be reproduced with the input selector.
3. Adjust the sound level with the volume control.
4. Operate the line straight switch, balance control, and tone control according to the reproduced source.

How to operate line straight switch

The line straight 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 balance control, tone control, and mode 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 the balance adjustment is not required, the balance control is set to the center position.

When the line straight switch is set to on, the balance control does not function.

How to operate the tone control

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

The low-frequency range type works in the 300 Hz or lower. 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 3 kHz or higher.

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 interlockingly function.

When the line straight 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 recording selector.
- * For dubbing:
 - Selection of rec-1; rec-1 → rec-2 (dubbing direction)
 - Selection of rec-2; rec-2 → rec-1 (dubbing direction)
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.
- * Reproduction of the source selected by the input selector can be enjoyed without effect on recording because the recording selector and input selector independently operate.
- * The recording selector works when the power is on.

Procedure of timer-controlled recording

1. Turn on the power switch to activate this unit.
2. Select a source to be recorded under timer control with the recording selector.
3. Perform time setting for start and stop times with your timer.
4. Refer to the operating instructions of the timer and other connected devices for further information.

If the volume control is not set to low levels, the source selected with the input selector may be reproduced from the speakers. Be sure to set the volume control to a low level.

Procedure of timer-controlled playing

1. Turn on the power switch to activate this unit.
2. Select a source to be reproduced under timer control with the input selector.
3. Adjust the volume level with the volume control.
4. Perform time setting for start and stop times with your timer.
5. Refer to the operating instructions of the timer and other connected devices for further information.

Memory

This unit stores the following items when the power is off:

Item	To be stored
INPUT	Selected source
display on/off	on/off

Memory reset

The following operations restore all the settings to the factory defaults.

- (1) Turn off the power of this unit.
- (2) Hold down the power switch for 5 seconds or more, and the power state switches from on to off.

That's all for memory reset.

Factory default	
Item	Default
INPUT	LINE-2
display on/off	on

30. Mute switch

Activates the mute function and blinks the power-on indicator resulting in no sound generated.

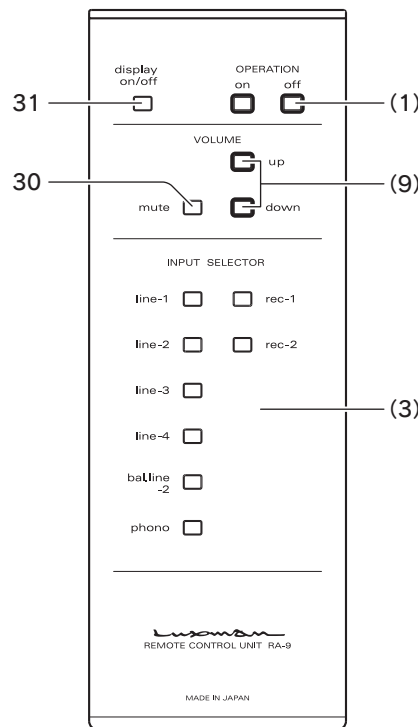
Pressing this button again to set the mute function to off allows sound to be generated.

31. Display (display on/off)

Turns off the meter lights. Pressing this switch turns off the meter lights.

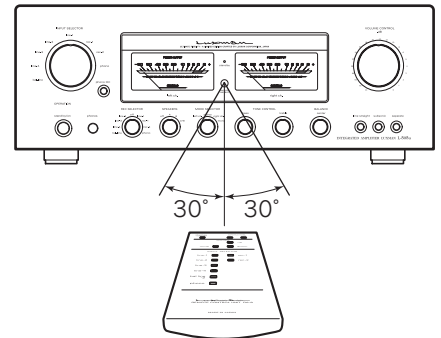
Pressing this switch again turns on the meter lights again.

*The value in parentheses indicates the number in "Names and Functions".



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.

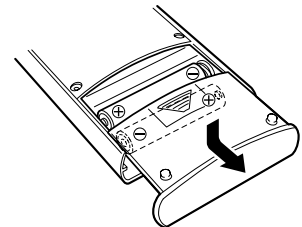


Effective distance: approx. 5 meters

Dry cell

[How to load dry cells]

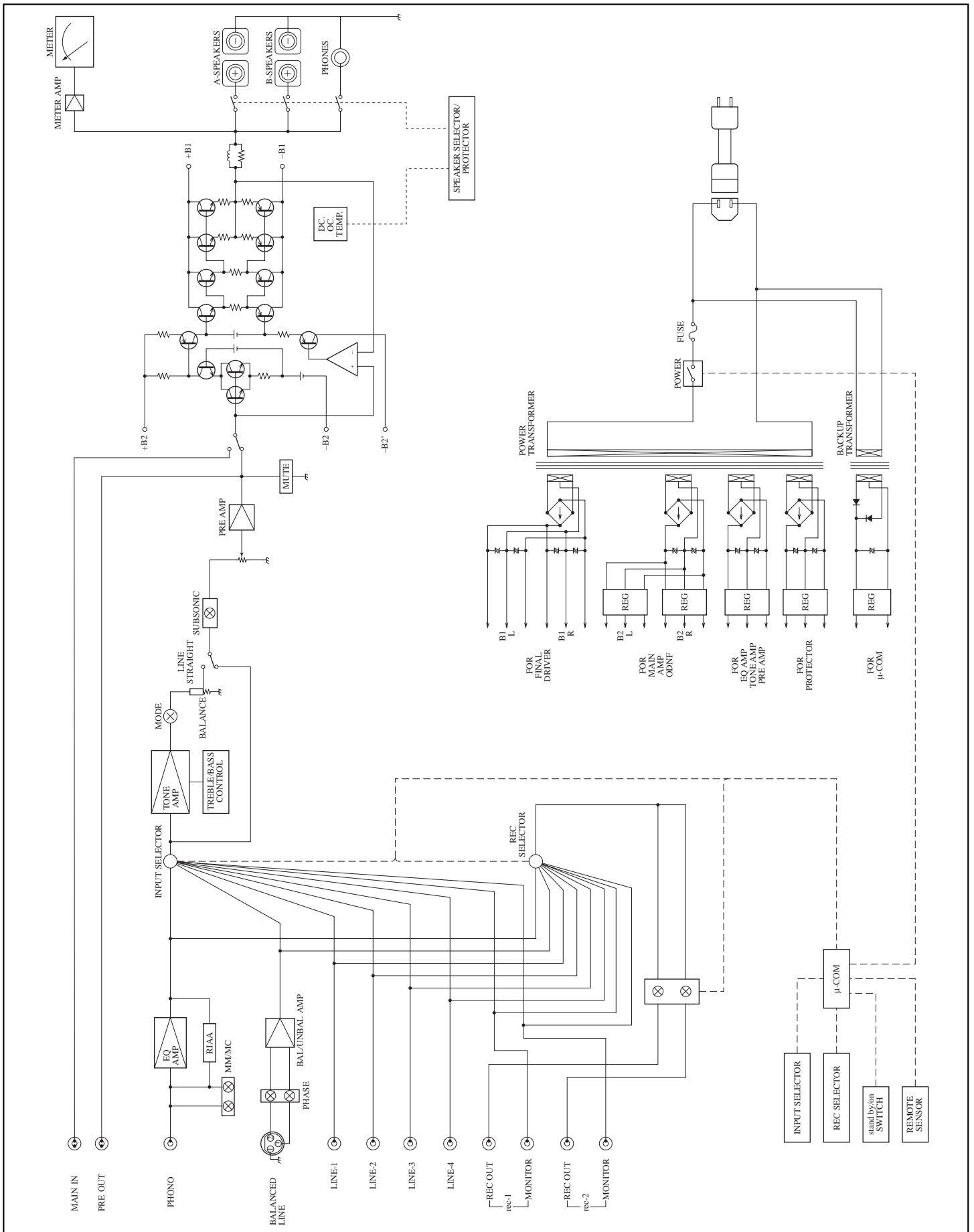
1. Put your finger on the battery cover claw on the rear of the remote control, and slide the cover downward to open it.
2. Put 2 AAA batteries in the battery case as shown in the illustration.
3. Close the battery cover.



*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.

L-505u Block Diagram



Specifications

Continuous power output	100W + 100W (8Ω) 140W + 140W (4Ω)
Total harmonic distortion	0.008% (8Ω, 1kHz both channels simultaneous drive, line straight on) 0.04% (8Ω, 20 ~ 20kHz, both channels simultaneous drive, line straight on)
Pre-amplifier	PHONO (MM) : 2.5mV / 47kΩ
Input sensitivity/input impedance	PHONO (MC) : 0.3mV / 100Ω
	LINE : 180mV / 42kΩ
	RECORDER : 180mV / 42kΩ
	BAL. LINE : 180mV / 79kΩ
Main-amplifier	MAIN-IN : 1V / 51kΩ
Input sensitivity/input impedance	
Output voltage	RECORDER : 180mV
	PRE-OUT : 1V
S/N ratio	PHONO (MM) : 91dB or more (IHF-A weighted, 5mV input, line straight on)
	PHONO (MC) : 75dB or more (IHF-A weighted, 0.5mV input, line straight on)
	LINE : 105dB or more (IHF-A weighted, input shorted, line straight on)
Frequency response	PHONO (MM) : 20Hz to 20,000Hz (±0.5dB, line straight on)
	PHONO (MC) : 20Hz to 20,000Hz (±0.5dB, line straight on)
	LINE : 20Hz to 100,000Hz (within -3 dB, line straight on)
Tone control	Max. amount of change BASS: ±10dB at 100Hz TREBLE : ±10dB at 10kHz
Damping Factor	: 110
Accessories	<ul style="list-style-type: none"> • Remote controller RA-9 • Owner's Manual • size "AAA" batteries (2) • Power cable • Safety cautions
Power supply voltage	AC 230V (50Hz)
Power consumption	290 W
	1.7 W (at standby), 98 W (at no input)
Max. external dimensions	467 (W) X 179 (H) X 437 (D) mm
Weight	21.0kg (main unit only)

* Specifications and appearance are subject to change without notice.

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 power switch is pressed.	<ul style="list-style-type: none"> The power plug is disconnected from the wall outlet, or it is not completely inserted. The power plug is disconnected from the AC inlet, or it is not completely inserted. 	<ul style="list-style-type: none"> Insert the power plug in the wall outlet securely. Insert the power plug in the AC inlet securely.
No sound is generated.	<ul style="list-style-type: none"> The volume control is set to the minimum level. The input selector is not set to the source to be reproduced. Cable connections are incomplete. The output level of the input device is set to the minimum position. The separate switch is set to on. 	<ul style="list-style-type: none"> Rotate the volume control clockwise to adjust the sound volume. Set the input selector to the source to be reproduced. Make cable connections securely. Adjust the output level. Set the separate switch to off.
No sound is generated on one side.	<ul style="list-style-type: none"> The balance control is fully rotated. The connecting cable is not connected on one side only. 	<ul style="list-style-type: none"> The balance control shall be set to the center position under normal conditions. Make cable connections securely.
Humming sound (boon or zzz noise) is generated.	<ul style="list-style-type: none"> The ground side of the pin-plug cable has no contact with the terminal. The ground wire of the record player is not connected. Connections or mounting conditions are incomplete between the cartridge and shell, or between the shell and tone arm of the record player. 	<ul style="list-style-type: none"> Make connections securely so that the ground side of the pin-plug cable can be connected. Connect the ground wire of the record player to the GND terminal. Connect (or mount) the cartridge, shell, and tone arm securely.
No effect of tone control or balance control is observed.	<ul style="list-style-type: none"> The line straight switch is set to on. 	<ul style="list-style-type: none"> When tone control or balance control is used, the line straight switch shall be set to off.
The light of the power meter is not turned on.	<ul style="list-style-type: none"> The display switch is set to off. 	<ul style="list-style-type: none"> Set the display switch of the remote control to on.

MEMO

