



LM-212 Premium User Manual



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Thank you very much for choosing our product, please read through this user manual first unless you know what you doing.



Thank you for using the LM-212 Premium integrated vacuum tube audio power amplifier. This product is equipped with sponge sleeves inside the vacuum tube covers to prevent damage to the vacuum tubes during transportation. Before using this product, you must remove the sponge sleeves from inside the vacuum tube covers, otherwise, it may cause damage to the unit or even fire.

Please read though this user manual before use.

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Notice



The LM-212 Premium integrated amplifier is designed and manufactured with our original parts to achieved the optimal performance.
We are not responsible for problems and damages caused to the amplifier by any non-original replacement parts.

Package Contents

Before unpacking, carefully check for any signs of impact, damage or moisture. Place the packaging box with the arrow pointing upwards. Open the packaging box, and the packing list is as follows:

- 1、LM-212 Premium MAIN *1
- 2、LM-212 Premium POWER *2
- 3、Power connection cables *3
- 4、12AX7 *2
- 5、KT88 *2
- 6、212 *2
- 7、Main fuse *4
- 8、Power cord *1
- 9、Remote Contro *1
- 10、User Manual *1

Attention::
Before plug in the power cord, please double check whether the voltage indicated on the back panel of the amp matches the local voltage. If not match, it may cause damage to the amp even fire. Please contact the local dealer or us.

Recommendation

Please retain all packaging materials, as you may need to repack the unit for future transportation.

Features

- Hand made construction with finest point to point wiring
- Two high-grade EI single-ended output transformers: Built with premium, wide-bandwidth construction and advanced finishing for extended highs and authoritative lows.
- Four power transformers wound on imported Z11 cores (133 × 70): High-capacity iron ensures a stable, low-noise supply with ample dynamic headroom.
- Preamplifier and driver stages: Two 12AX7 tubes for voltage gain and two KT88 tubes as dedicated drivers.
- Class-A single-ended power stage: Two 212 power triodes deliver pure, dimensional drive with effortless scale.
- Volume and mute function remote control
- Soft start High-Voltage Delay and Power on mute delay(30 sec) for safer startup and speaker protection.
- A Japanese ALPS audio grade volume potentiometer is applied.
- 9.Handy plug-in type tube cover.
- 10.Premium dual-needle output level meter
- 11.Self-bias architecture:Automatic biasing for consistent performance, tube stability, and easy maintenance.
- Unique separate power-supply system: A true two-chassis design: one chassis houses the tube amplification circuitry; the other contains the transformers and primary power processing (rectification and filtering) to reduce interference and lower the noise floor.
- Supple, expansive sonics: Exceptionally fine micro and macro dynamic expression with airy extension and natural warmth—equally at home across all musical genres.

Warraney statement

All products from Line Magnetic are guaranteed for one year from the date of purchase (excluding electronic tube parts), six-month warranty for tubes. No fees are charged during the warranty period. Amp which requiring repair must be carefully packaged and sent to our company or the dealer where Amp were purchased. We are responsible for repairing machines during the warranty period, with no charge for component fees, labor costs, or shipping fees. The following situations are not covered by the warranty:

- 1:Machines that have been repaired or adjusted by anyone without authorization by Line Magnetic.
 - 2:Damage caused by misuse or abuse, transportation, or negligence, which is not covered by the warranty.
 - 3: Damage to other equipment caused by the use of our products is not covered by the warranty service.
 - 4: Damage identified by us as caused by abuse.
- All warranties are subject to this warranty policy.
Warranty is based on the original purchaser and is not transferable.

Note: We reserve the right to upgrade this manual without further notice.

Trouble Shooting

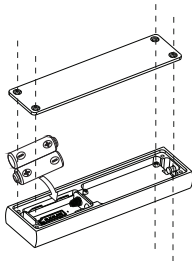
In order to maintain the superior performance of this device, please ensure proper maintenance and operation. Improper operation may lead to mis-identification as malfunction. If there is an issue with this device, please check the following things below. Sometimes the problem could be on other equipment which connect to this device, please check them as well as relevant connection lines. If the fault has not been resolved, please contact the local distributor or our marketing department.

Problems		Cause	Solution
No Sound	Power LED is OFF	Power cord is not properly connected	Please check power supply and power connection
		Main fuse is out	Replace with fuses of the same specifications
		Internal failure	Contact your local dealer
	Power LED is NO	Volume is at MINIMUM	Turn up the volume
		No input signal	Check the audio source
			Check the audio source selector
Distorted sound		High input signal level	Turn the volume down
The noise is too loud	The ground wire of input signal line is open-circuit or bad contact		Reconnect it as suggested in the manual
	Internal failure		Contact your local dealer
Acoustic field is unacceptable		The left and right channels of the input and output are reversed or the positive and negative terminals of the speakers are connected incorrectly	Reconnect it as suggested in the manual
Remote control erratic/unresponsive	Disturbed by external devices		Stay away from interference sources. turn off the device, and turn it back on later
	Running low on battery		Replace the battery
	IR ray (from remote control to IR sensor) is blocked by something		Make appropriate adjustments based on the situation

Functions Description

Battery replacement:

- 1: When the battery voltage is low, the remote. control's operating distance will shorten, and new batteries should be replaced.
- 2: The remote control uses two "AAA" batteries.
- 3: Do not mix old and new batteries.
- 4: Please use batteries that prevent internal electrolyte leakage.

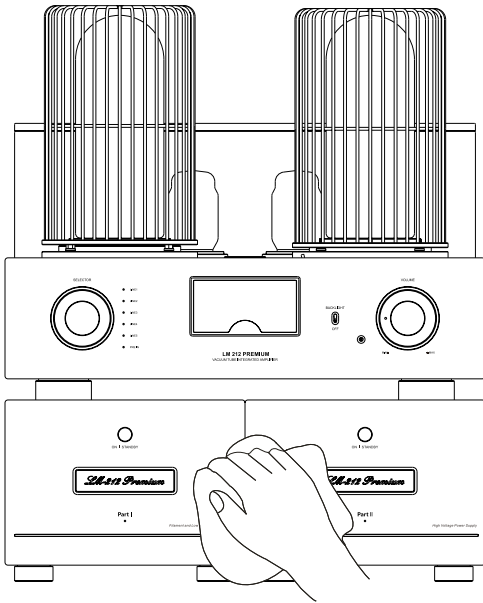


Tube Replacement

Tubes complement	Common Replacement
212	
KT88	KT88EFH、6550EH、6550、6550A
12AX7	12AX7EH、ECC83、E83CC、CV4004、ECC803、5751

Maintenance

Clean the amplifier with soft dry rag, please do not use any chemicals for cleaning.



Specification

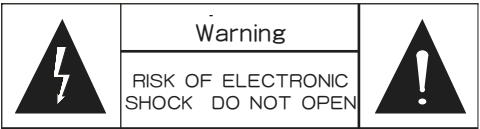
Power output: 50W+50W (single-ended class A)	THD: 1% (1kHz)
Input Sensitivity: integrated 150 mV	Pre-in 500 mV
Input Impedance: 100k Ω	Input Impedance: 100k Ω
dimensions (WxDxH) : (500 x 610 x 555) mm ³	Output Impedance: 4 Ω 8 Ω 16 Ω
Tubes: 212 x2、KT88 x2、12AX7 x2	Power consumption: 700W
Power supply: $\sim$ 115V/120V/220V/230V/240VV 5% (50Hz/60Hz)	Net Weight: 141kg
Working Condition : Temperature : 0 $^{\circ}$ C $\sim$ 40 $^{\circ}$ C:	Moisture: 20% $\sim$ 80%
Storage Condition : Temperature : -20 $^{\circ}$ C $\sim$ 70 $^{\circ}$ C	Moisture: 20% $\sim$ 90%

Notice: Due to continuous product improvement, the company reserves the right to change specifications without prior notice. This manual is only consistent with the product it attached. The values shown for performance specifications are nominal values for the product; each unit may have slight variations. Please be aware of this.

Safety Precautions

- 1: the power cord should be unplugged to prevent accidental incidents when amplifier is not going to be turn on for an extended period of time.
 - 2: The surface of this amplifier may become hot during operation. Do not block the ventilation holes and place the unit in a well-ventilated area. Poor ventilation can lead to excessive internal temperatures even malfunctions or fire.
 - 3: Forbidden to operate as unload.
 - 4: In working condition, the output end should not be left open or short-circuited to prevent damage to amplifier.
 - 5: Do not attempt any internal maintenance unless you know what you doing, specially some of internal components are electriferous.
 - 6: We are not responsible for performance degradation or any damage caused by unauthorized internal modifications. Any repairs must be performed by professional service personnel.
 - 7: This product must not be exposed under dripping or splashing water. It could cause some serious damage to this product.
 - 8: Clean the panel and external device with a soft rag periodically. Forbidden to use any type of diluent, alcohol or other volatile liquids for cleaning as they can damage the surface layer and cause stains even erase various markings. Do not use insecticides any where near amplifier.
 - 9: Handle with care when moving to avoid any damage to the amplifier.
 - 10: During thunderstorms, unplug the power cord from the socket to prevent lightning damage to the amplifier.
- Recommendation: Before you install the amplifier, please double check that other related equipment is well connected and ready. The following precautions should be taken when placing the amplifier.
- 1: Do not place the amplifier in direct sunlight or near other heat sources.
 - 2: To prevent overheating, ensure that the amplifier's heat dissipation vents are not covered by other objects.
 - 3: Avoid moisture or dust.
 - 4: When placing the amplifier, ensure easy connection to the power supply and other related equipment.
 - 5: This amplifier should be placed stably, with all four feet evenly supported.
 - 6: Maintain a distance of at least 15cm between the power amplifier and surrounding walls.

Safety Precautions



WARNING: To prevent the risk of electric shock, do not remove the outer casing (or bottom cover); if repairs are needed, please contact a professional service technician. To avoid fire and electric shock hazards, do not expose this unit to rain or moisture.



The lightning bolt with an arrowhead within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The warning mark inside equilateral triangle is used to remind user to pay attention to important operational/maintenance instructions mentioned in the manual.

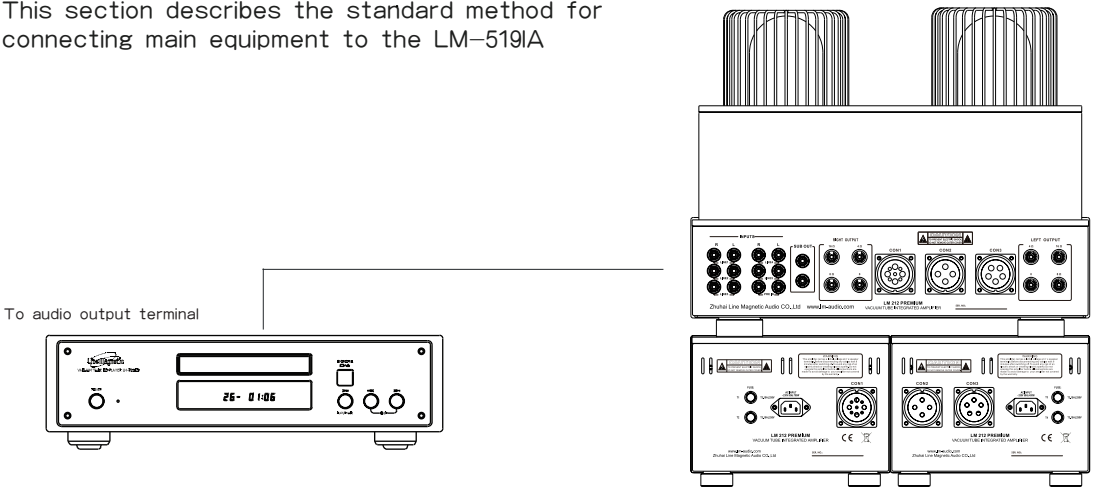
Notice: The designed power supply voltage for this amplifier is ~115V/120V/220V/230V/240AC $\pm 5\%$, its is important to confirm that whether the power supply voltage meets the requirements. Otherwise it may cause this amplifier malfunction or even harm its lifespan. This product is for non-tropical climate conditions and only suitable for altitudes where below 2000 meters



Connection

Audio Connection:

This section describes the standard method for connecting main equipment to the LM-519IA



Audio Connection Notes:

- Please always refer to the manual provided from other device when you connect them to the amplifier.
- Do not plug in the power cord until all other equipment is well connected.
- Red terminal (R) is for right channel, black terminal (L) is for left channel.
- Make sure the cable connection is firmly, improper connections may cause noise, poor performance even equipment damage.
- Do not bundle the audio cable with power cords and speaker cables, it will effect the sound quality.

Functions Description

Notice:

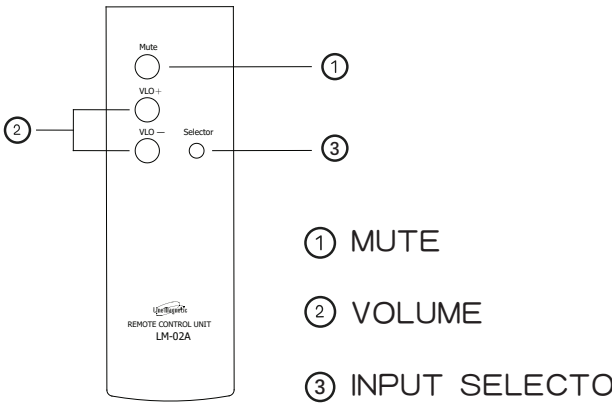
- 1: It is normal for the power transformer of this unit to generate heat during prolonged use.
- 2: If the unit will not be used for a long time, please unplug the power cord.
- 3: Turn on the power only after all other related equipment include the speaker is well connected.
- 4: Forbidden to plug or unplug signal lines or speaker cable while your audio system is turning on to avoid damaging amplifier.
- 5: After switch off the power, you should wait for 2 minutes before turning on the power again for the sake of tubes lifespan.

Warning:

The voltage of your power supply must match the voltage marked on the back panel of the device. Our company will not be responsible for any fire or other accidents cause by any voltage other than the specified one.

Remote contro

Functions Description

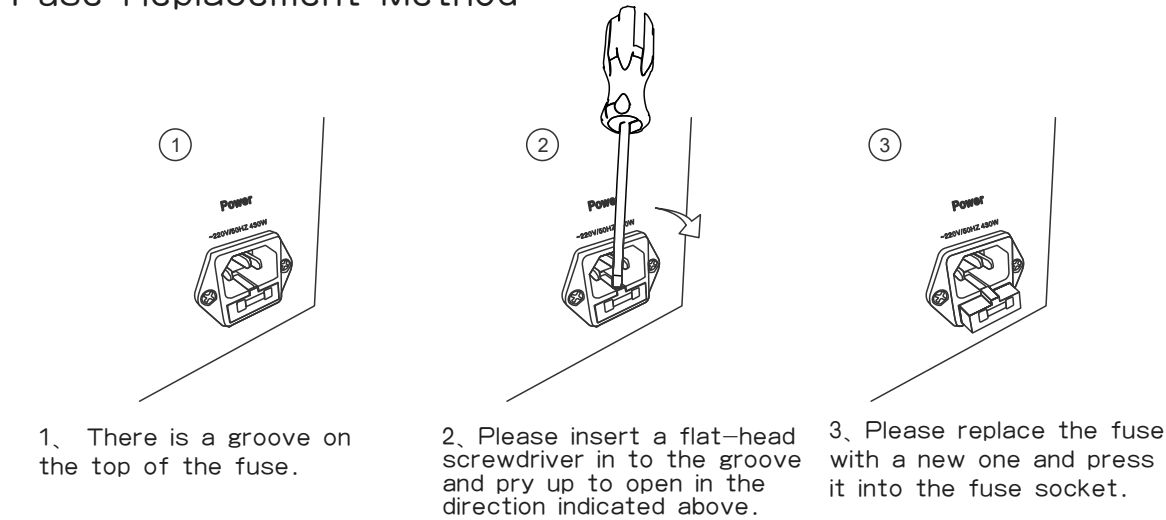


Installation/Replacement of Batteries

- 1、 Remove the battery compartment cover.
- 2、 Insert "AAA" batteries according to the (+) and (-) indications.
- 3、 Replace the battery compartment cover

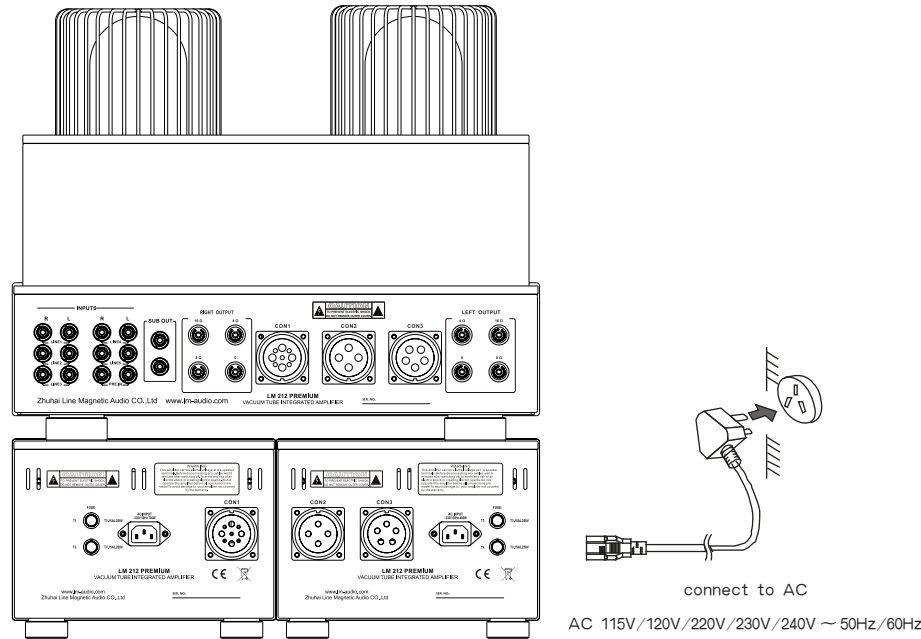
Function Description

Fuse Replacement Method



IMPORTANT: BEFORE TURNING ON THE AMPLIFIER:

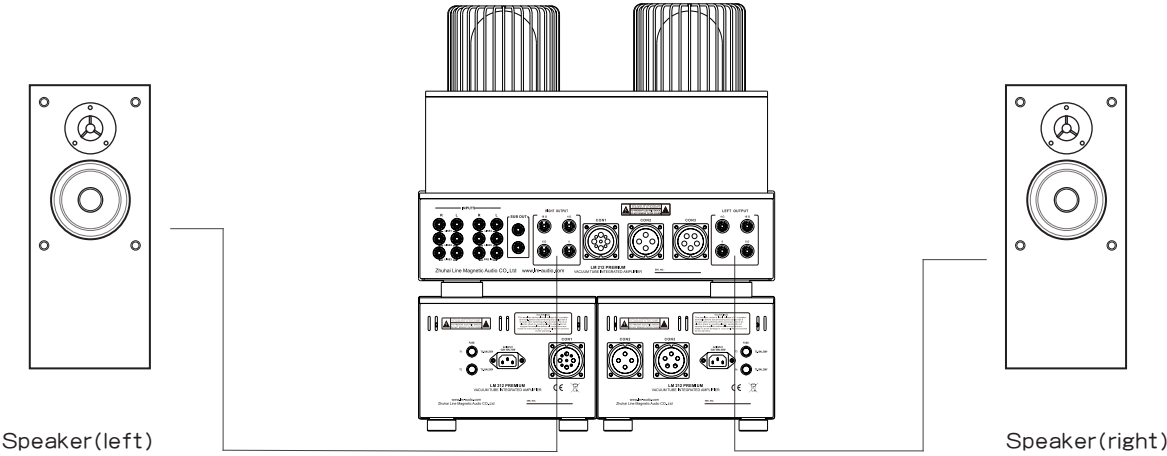
Connect the speaker cable and signal cable first and then plug the power cord of amplifier into the power socket.



Connection

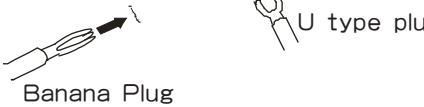
Speaker Connectio

Please use speakers with an impedance of 4Ω、8Ω or 16Ω. If the speaker has the impedance of 6Ω, its safe and will not do any damage to the amplifier to connecting it to 4Ω or 8Ω terminal. User can choose basic on the sound of their audio system, it is recommended to connect to the 8Ω terminal. Connect the black wire to the negative(0Ω) terminal and the red wire to the positive(4Ω) or (8Ω) terminal. If the left and right speakers are wrongly connected or the polarity is reversed, the sound will become unnatural and blurred.



How to connect the speaker cable:

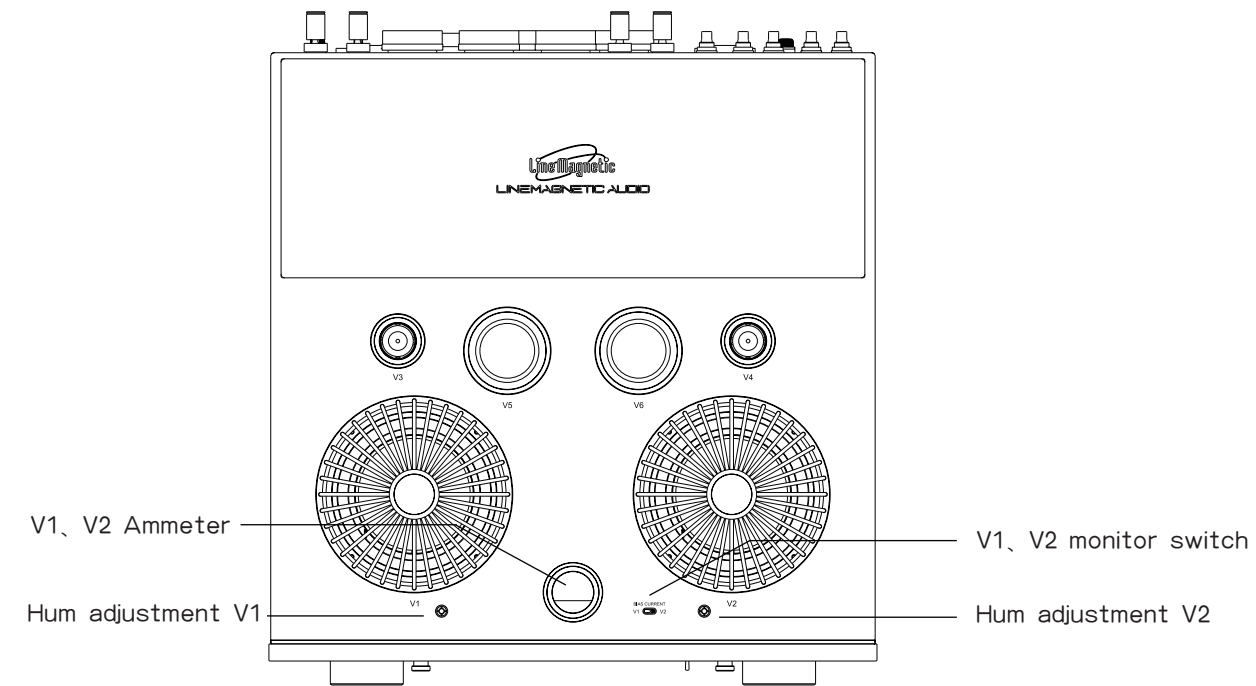
- 1: Unscrew the terminal knobs.
- 2: Insert the speaker cables.
- 3: Screw the terminal knobs.



Notice:
Connect the speaker cables with the amplifier after it is well connected with the speakers, please connect both left and right channel of speaker to this device, be aware that signal flow direction on the speaker cable. Do not allow the positive and negative speaker cables to short-circuit .

Function Description

Top panel



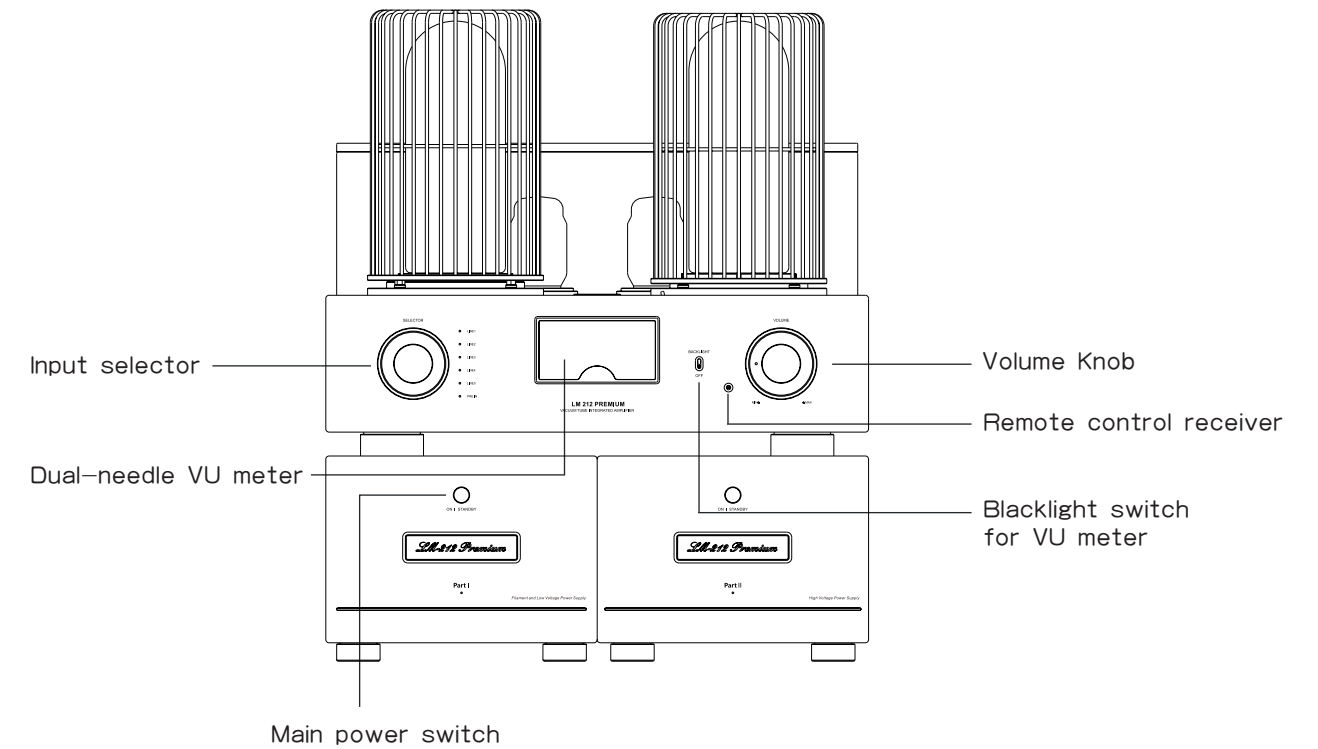
V1, V2: 212 power tubes V3, V4: 12AX7 singal amplification V5, V6: KT88 push tubes

Notice:

- 1: the surface temperature of tube is very high during operation,
- 2: the power tube and the drive tube should be used in pairs

Function Description

Front panel



Rear panel

