

Wonder Audio Labs

USER MANUAL

Reference Phono

High-End Phono Stage Preamplifier

Dear music lover,

Thank you for purchasing a Wonder Audio Labs Reference Phono.

In order to achieve maximum performance and reliability you should study these instructions for use carefully.



Warning of a hazard for the user, the unit or possible misuse.



Important notice.

Safety instructions



AC outlet voltages vary from country to country. Before connecting to the mains, make sure that the voltage in your area meets the voltage requirements printed on the power supply. The power supply is used to connect/disconnect the unit from the mains. Make sure that the power supply is easily accessible at all times. Never handle the device, the power supply while your hands are wet or damp. Avoid letting liquids enter the device or the power supply. Never place any liquid item, such as a flower vase on or near the device. Never spill any liquid on the device or the power supply. Never place naked flame sources, such as lighted candles on or near the device. The product shall not be used in damp or wet locations, next to a bathtub, sink, swimming pool or similar conditions.



To reduce the risk of electric shock, do not remove cover. No user-serviceable parts inside.

Refer only to qualified Wonder Audio Labs service personnel for service.

● INTRODUCTION

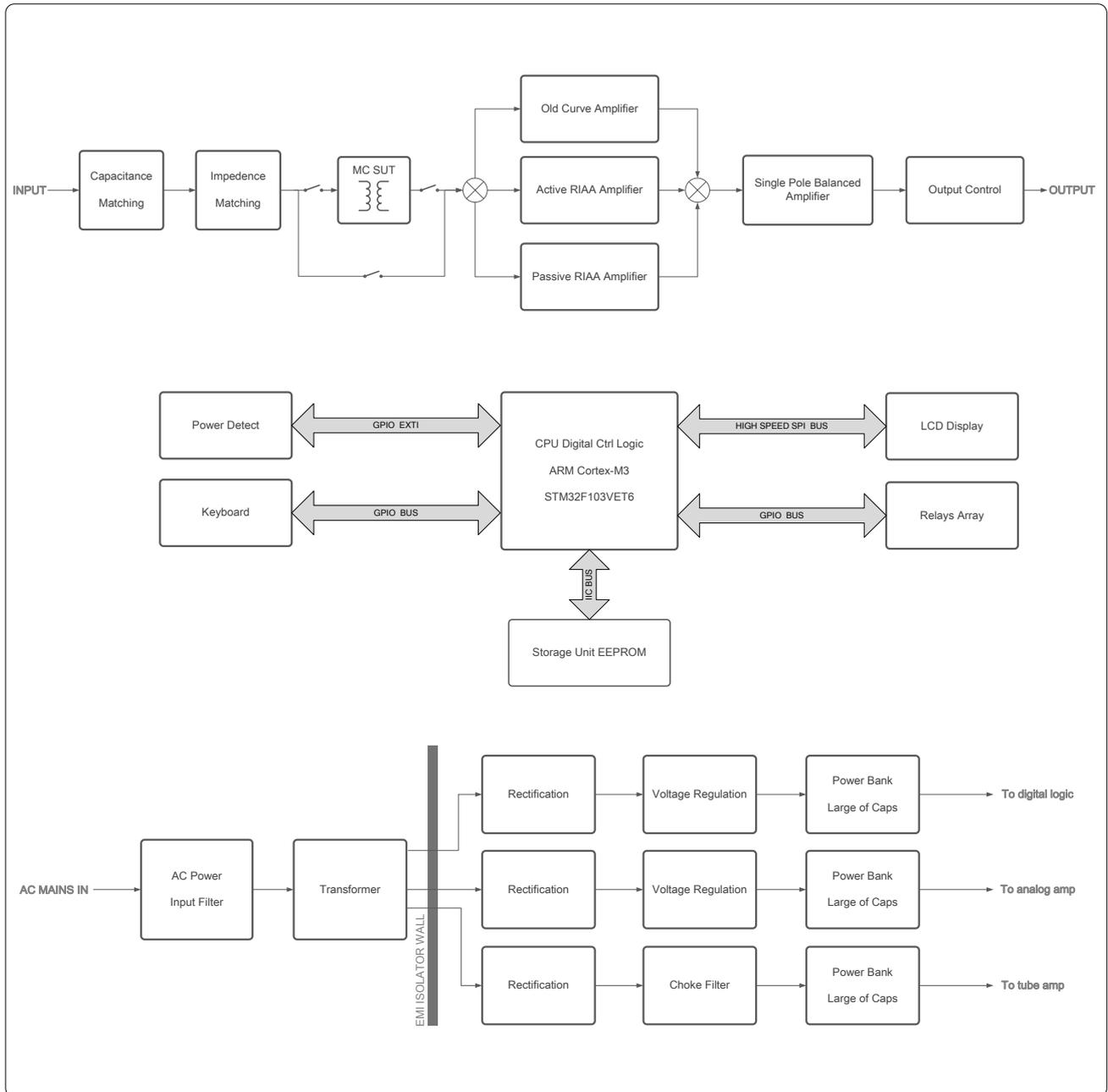
Reference Phono is an epoch-making reference level cartridge preamplifier, that combines advanced precision JFET、BJT with an innovative design based on transistor, linear regulator, and vacuum tube technology, it is also the world's first phono stage with 6 independent inputs.

Wonder Audio Labs was founded in 2022 by renowned Hong Kong audio expert William Tam and the electronic engineer Tom Tang. They started designing the brand's first phono amplifier in August of the same year and officially released P1 in February 2023.P1 was succeeded by P1 Deluxe,which was released in January 2024.

After three years of research and design, it will be officially released and launched Reference Phono in August 2025. This machine provides a wide range of adjustable parameters and convenient adjustment methods, which can unleash your vinyl system's ultimate sound quality performance.

● SYSTEM TECHNOLOGY DESCRIPTION

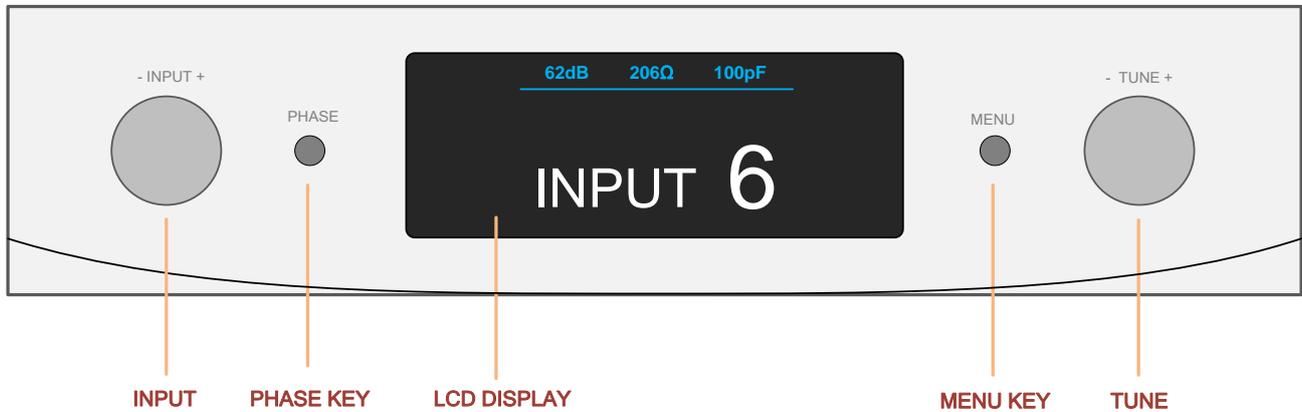
Reference Phono System Architecture Block Diagram



● TECHNICAL SPECIFICATIONS

ITEM	PARAMETER
Inputs	6 Inputs, 3xRCA, 3xXLR, All support MM & MC
Outputs	1 x RCA, 1 x XLR
Frequency response	20 Hz -- 20k Hz
Total Harmonic Distortion	< 0.02% max @1kHz
Signal-to-noise ratio	100 dB
Dynamic range	110 dB
Input impedance	10 Ω -- 2000 Ω , 47k Ω for MC, 47k Ω for MM
Input capacitance	32 options: 0pF – 1800pF
Curves	Active RIAA, Passive RIAA, 100 OLD EQ curve
Gain	40,42,44,46,48,50dB/MM, 55,60,62,64,66,70dB/ MC
Vacuum tube	4 x ECC82 / 12AU7
Power supply	AC 110V / 115V / 220V / 230V, 50 / 60Hz
Power consumption	40 Watts
Weight	> 12.5 kg - net
Dimensions	435mm W 100mm H 400mm D

● FRONT PANEL OVERVIEW



LCD DISPLAY

The LCD screen displays various information, and the menu displays various parameters.

INPUT KEY

Turn the input selector key the source you wish to listen up. Select the input by rotating, and then press down to confirm.

PHASE KEY

Click to switch between normal phase and inverse phase.

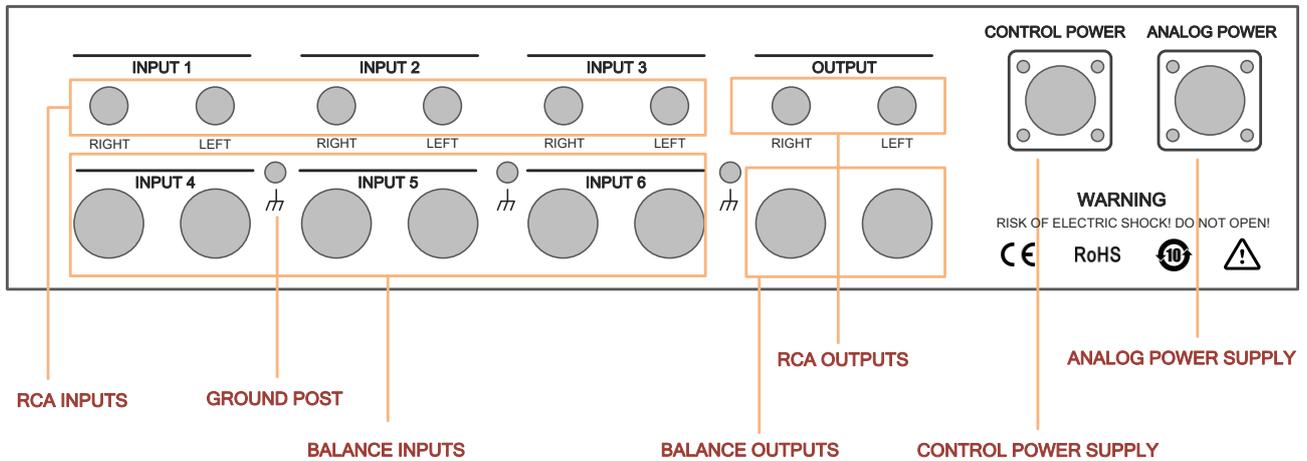
MENU KEY

Enter the menu item to set various parameters. After setting, press once to exit the menu option and resume playing music.

TUNE

Knob to quickly adjust the addition and subtraction parameters.

● REAR PANEL OVERVIEW



RCA INPUTS

Three groups RCA inputs are available, IN1 / IN2 / IN3. Each channel is equipped with 2 colour coded binding.

BALANCE INPUTS

Three groups XLR inputs are available, IN4 / IN5 / IN6.

GROUND POST

Three ground post are provided for connection to those source components that also use a separate ground terminal.

RCA OUTPUTS

Single-ended audio signal output.

BALANCE OUTPUTS

Balance audio signal output.

CONTROL AND ANALOG POWERSUPPLY INPUT

It is equipped with an aviation socket. Use the supplied mains cable to connect the unit to the split power supply.

● LCD DISPLAY OVERVIEW

60dB 206Ω 220pF

INPUT 6



Menu 1

Res Cap Gain

Menu 2

Phase Subsonic Curve

Menu 3

MONO System SuT



Res

206 Ω

Cap

220 pF

Gain

MC **60dB**

Phase

Normal

Subsonic

Sub OFF

Curve

Passive RIAA

Turn Over freq 500Hz
Treble 10kHz -13.7dB

Mono

Mono OFF

System

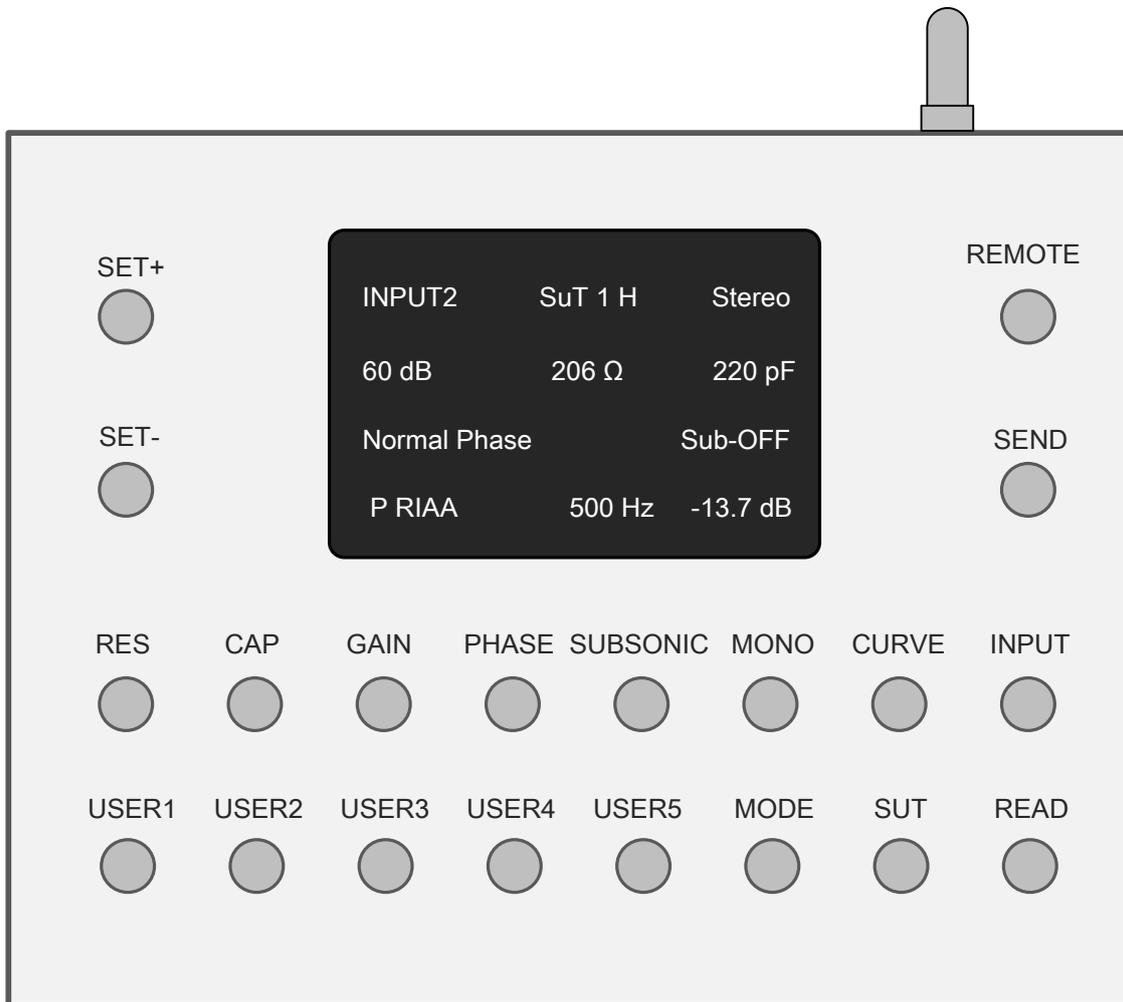
Manufacture Date: 2025-08-18
Series Number: 168
Unique ID: D2 E6 FA B9 2C

Curve

Old EQ

Turn Over freq 600Hz
Treble 10kHz -10.5dB

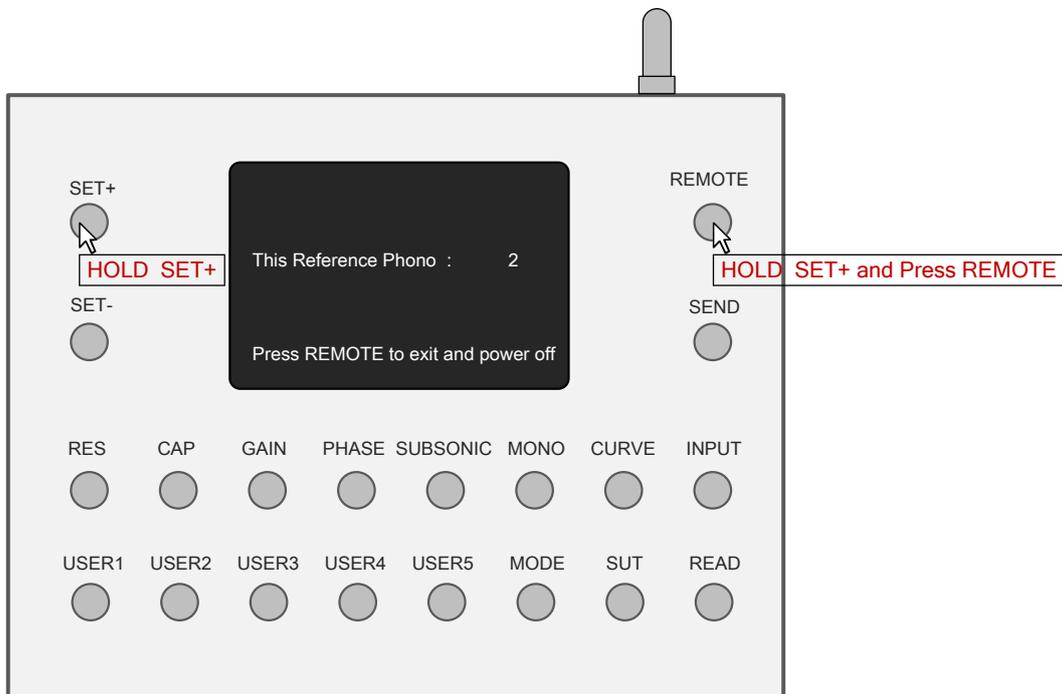
● REMOTE CONTROL



This is a remote control utilizes 2.4GHz data communication technology and can exchange data with the host device. It can send data packets to the host and also read data from it. Equipped with a built-in lithium battery, it can be charged via a standard Type-C port. There are two working modes for the remote control:

1. **Conventional data-type control:** all required parameters are set and then sent to the host for execution at once.
2. **Debug mode control:** individual parameters are adjusted one by one, with the host maintaining synchronization with the remote control parameters while working.

● REMOTE CONTROL SETTING

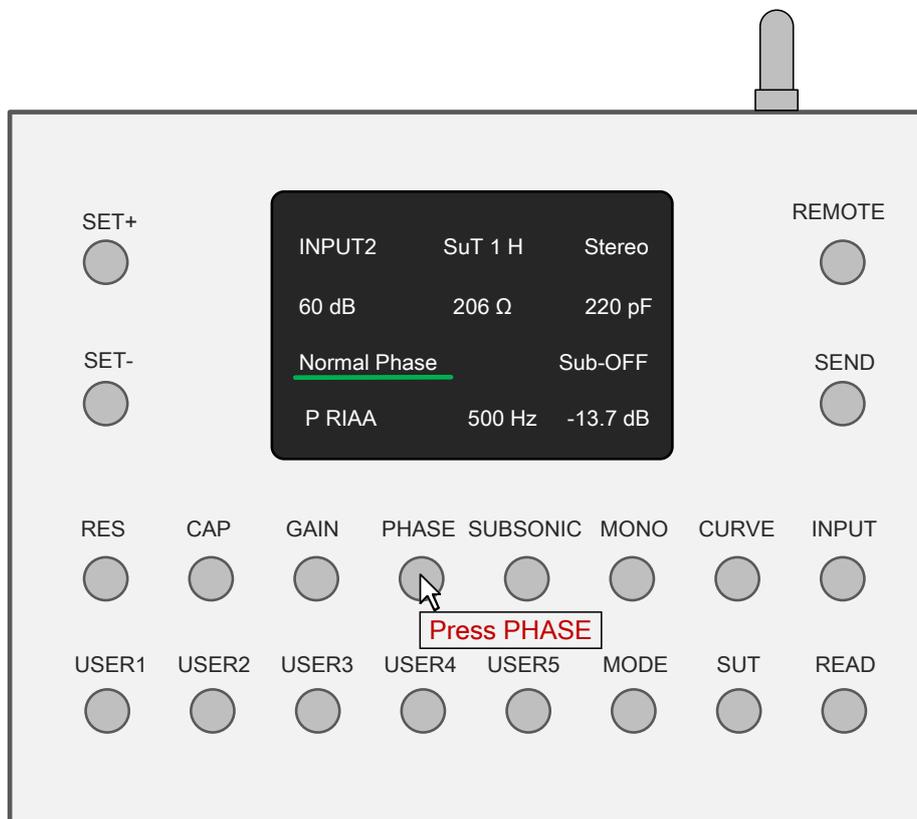
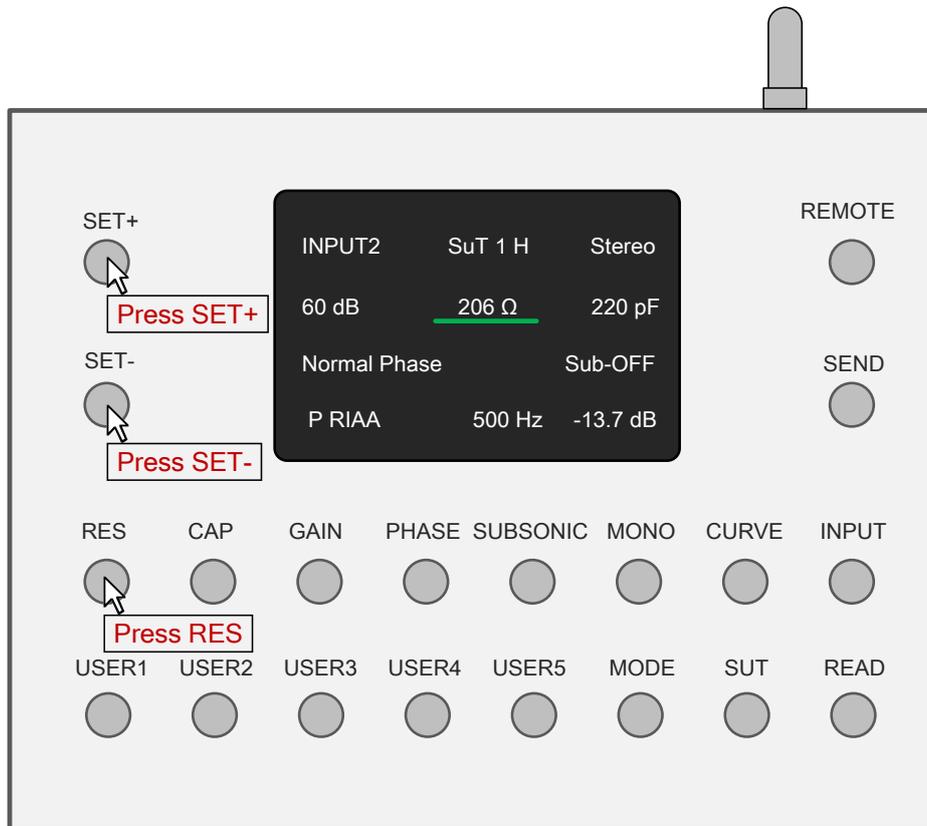


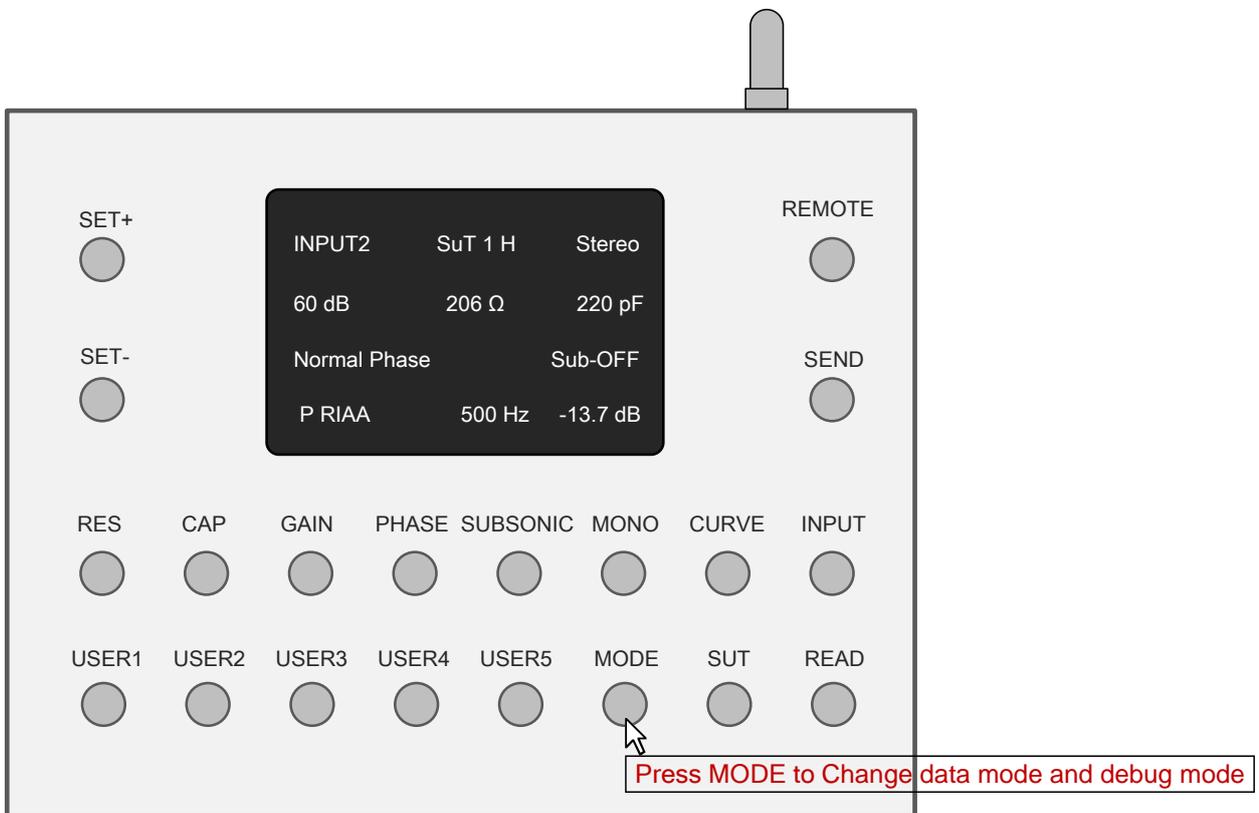
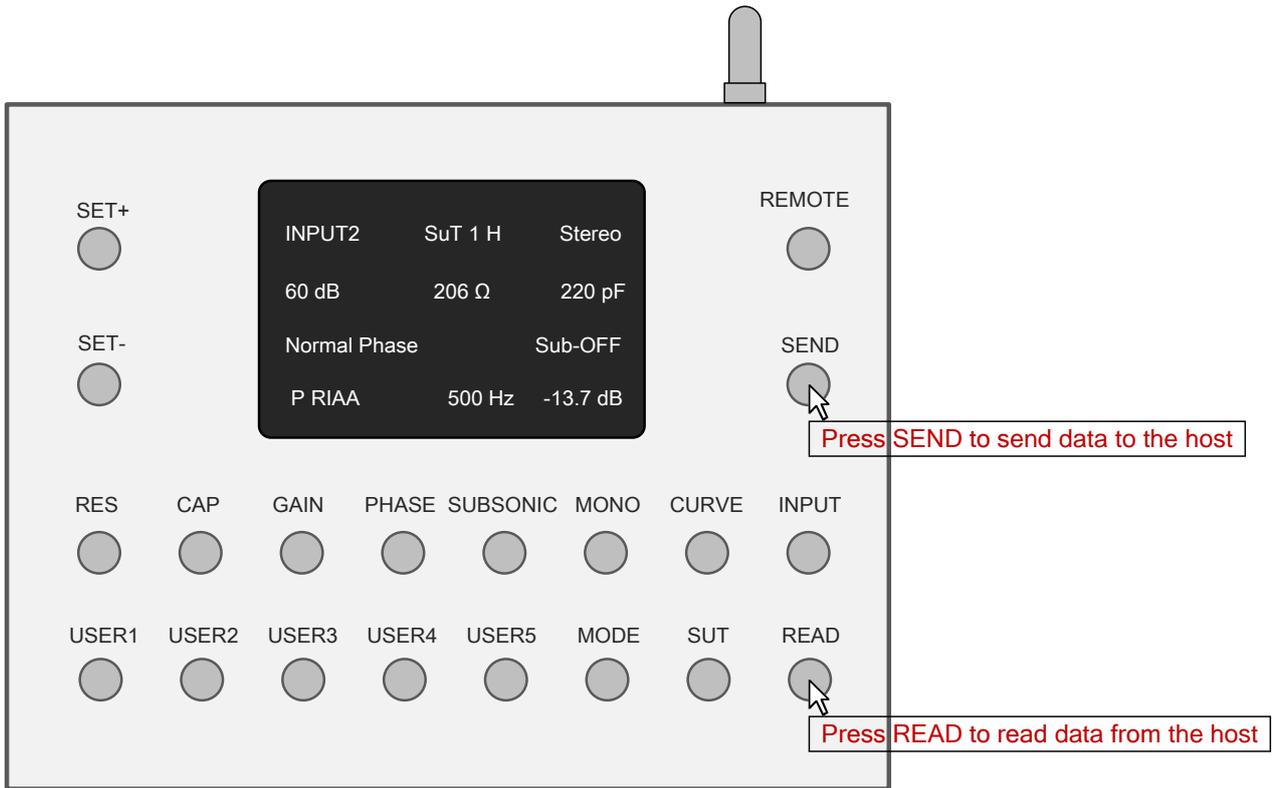
Press and hold the **SET+** button, then press the **REMOTE** button to enter the setting mode. Ensure that the remote SN code matches the SN code of the main unit to ensure successful communication pairing.

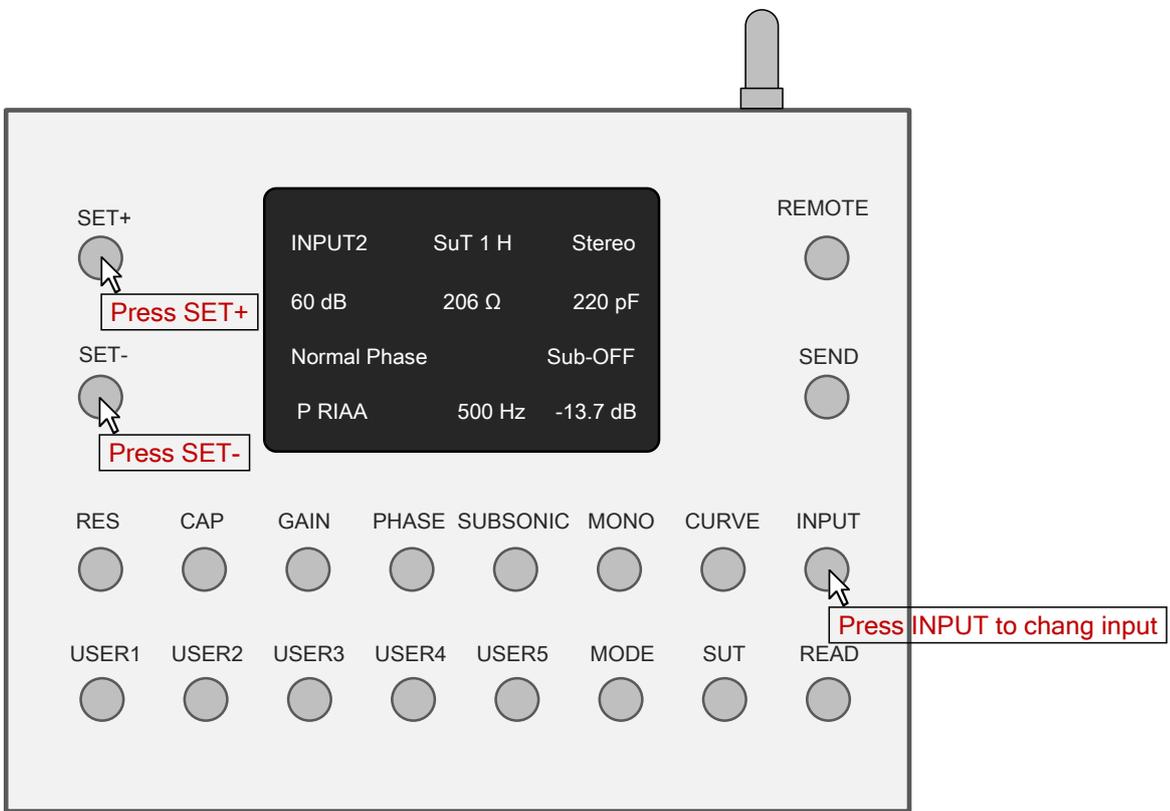
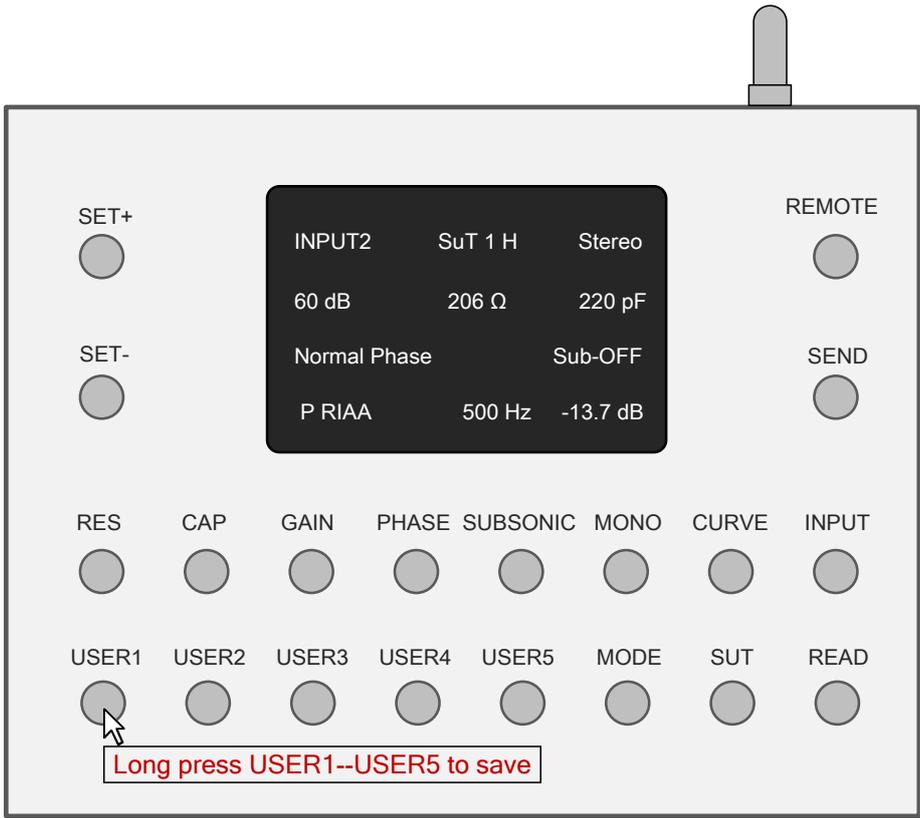
To view the host's SN code, follow these steps: On the third page of the host's menu, navigate to the system page, and you will be able to see the machine's SN code.

The **REMOTE** button is the power switch for the remote control. Pressing it once turns on the device, while pressing it again when the device is turned on turns it off

● REMOTE CONTROL ADJUST PARAMETERS







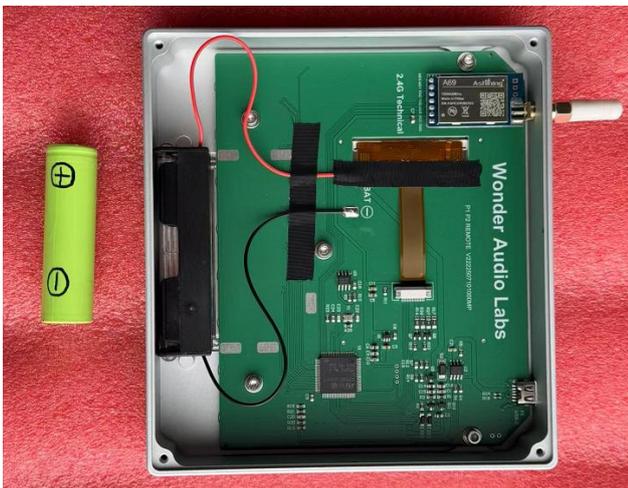
● Installation of lithium battery for REMOTE



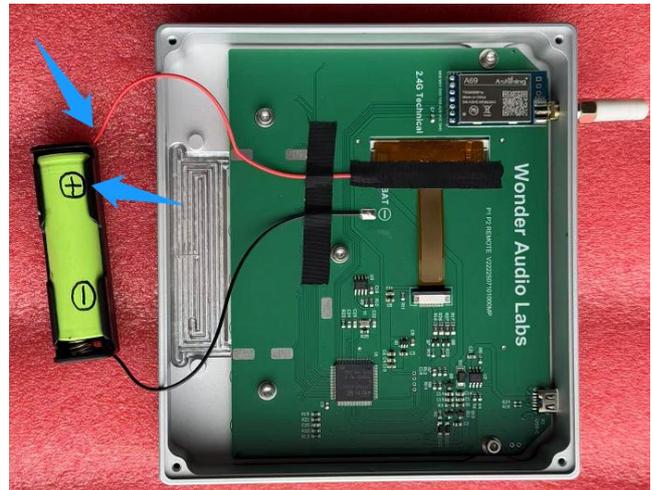
Take out the remote control and batteries



Unscrew the screws to open the cover



Put the battery in according to the method shown in the diagram



Illustrative details showing the insertion of the battery socket into the circuit board

WARRANTY INFORMATION

Wonder Audio Labs warrants this product to be free from defects in materials and workmanship for one year from the original date of purchase from an appointed Wonder Audio Labs dealer and agrees to covers the cost of parts and associated labour required to correct such defects, subject to terms & conditions.

This Warranty is offered to the first purchaser only.

Any valves supplied with the unit are warranted for three months from the original date of purchase.

If the product fails in normal domestic use and during the Warranty period due to the above-described faults or defects, Wonder Audio Labs will at its discretion, repair or replace the item free of charge within a reasonable time once it has been returned to Wonder Audio Labs or an appointed Wonder Audio Labs dealer or service engineer.

Wonder Audio Labs is not liable for any shipping charges incurred whilst transporting the product to or from Wonder Audio Labs or an appointed Wonder Audio Labs dealer or service engineer, should the item require service or repair during or after the Warranty period.

If the product must be shipped, please use the original packaging materials and include a copy of the original sales receipt along with a note explain, In as much detail as possible, the problems you are experiencing with the unit.

Only use a reputable Courier Service or Shipping Agent, and ensure your product is insured during transit.

Any servicing, repairs, or modifications not authorized by Wonder Audio Labs, or carried out by persons other than appointed Wonder Audio Labs service engineers Will invalidate an warranty.

This Warranty does NOT cover :

Damage sustained whilst in the possession of a shipping agent, retailer, or consumer and not caused direct by defects in materials or workmanship.

Damage caused by normal wear and tear.

Damage or defects caused by abnormal or unreasonable use.

Damage caused by accident, acts of nature, misuse, or neglect.

Damage caused by a failure to follow the operating and installation instructions supplied with the product.

Damage caused by improper or careless cleaning.

Wonder Audio Labs reserves the right to refuse warranty for any component whose serial number has been removed, defaced or tampered with.

登記日期
Registration Date _____

登記號碼
Registration No. _____

WARRANTY REGISTRATION 保用登記

< Please use BLOCK LETTERS to fill the form for registration >

Brand & Model 牌子及型號 _____

Date of Purchase 購入日期 _____

Serial Number 貨品編號 _____

Customer Name 姓名 _____

Telephone 電話 _____

Address 顧客地址 _____

E-mail Address 電郵地址 _____

IMPORTANT 重要事項

This warranty card will be voided if not filled out and returned together with a copy of the purchase invoice within 14 days from the date of purchase. 請於購貨後十四天內填妥此保用證，將此部分連同購買時商戶票據寄回本公司，逾期無效。

We thank you for your confidence in our products. We guarantee the products you have purchased to be free of defects under the following conditions:

WARRANTY CONDITIONS

- 1、 One year free-of-charge service is provided to the original purchaser from the date of purchase, including parts and labour (excluding transportation & outdoor service charges).
- 2、 This warranty does not cover routine inspection, adjustment, or conversion.
- 3、 This warranty does not cover cabinets, grilles, cables, chassis, or other exterior finishes.
- 4、 Damages arising from accidents, alteration, negligent and improper installation, misuse, breaking, vibration, abuse, and improper repairs.
- 5、 Products with serial numbers removed, altered, or defaced are not covered by this warranty.
- 6、 This warranty applies to the equipment used under local voltage (220V \pm 10% / 115V \pm 10%).
- 7、 This warranty does not apply to a product used for non-domestic purpose.

C O N T A C T I N F O R M A T I O N



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