

## TAURUS PRE Balanced Line-Stage Pre-amplifier



# USER'S GUIDE

Revision 1.0

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**AURALIC LIMITED**

RM 19C, LOCKHART CENTRE, 301-307 LOCKHART ROAD, HK

Phone: +852 6852 3312. Fax: +852 8199 9198

Email: [support@auralic.com](mailto:support@auralic.com). Website: [www.auralic.com](http://www.auralic.com)

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# Welcome

TAURUS PRE is a fully balanced line stage pre-amplifier. It is the finest coalescence of art and passion by inheriting the design essence of analog recording equipments from the 'golden age' and aesthetic taste of this new era. Together with MERAK, the power amplifier, TAURUS PRE would bring an ideal audio playback system, which is fantastic enough to please the most enthusiastic audiophile.

- **AURALiC ORFEO Class-A Output Module**

Inspired by Neve 8078 analog console's circuit design, AURALiC developed ORFEO Class-A module. The principle of this module is to use a mass of small signal components with best linear characteristic. By packing them through a thermal balance procedure and bias the transistors into Class-A, ORFEO achieves impressive performance with open loop distortion less than 0.001%. With such sophisticated design, ORFEO shares the same warm and natural sound with Neve 8078. The ORFEO module used in TAURUS PRE was tweaked with optimized bias current so it will be better fit for pre-amplifier use.

- **Low Noise Input Buffer**

The low noise input buffer in TAURUS PRE is specifically designed by AURALiC to meet the requirement for pre-amplifier usage. It presents great linearity with a maximum undistorted input level as high as +24dBu, making it almost impossible to overdrive and well suited for any source component. This buffer also owns an exclamatory low noise of less than 1uV while maintains high input impedance (100K of RCA and 200K of XLR). With this circuit design, TAURUS PRE has a dynamic range over 130dB and possible to fit into any kind of source, even with high output impedance devices such as valve buffered CD, it can still easily capture every details and ensure the reality of music impression.

- **Advanced Purer-Power™ Solution**

To satisfy TAURUS PRE's extremely low noise design, AURALiC introduce the advanced Purer-Power solution. The new solution utilizes our triple shielded main transformer customized by Plitron. Comparing to the usual shield transformer, triple shield transformer has much lower EMI; the noise level raised by a triple shield transformer is even below measurement's resolution. Purer-Power solution can strongly isolate common-mode and differential-mode interference from both within and outside audio band as high as 90dB while reshape the electrical circuit and remove DC current. It can also effectively prevent electrical circuit from being interfered by those current entering into system via power supply, by which means to ensure more stability of circuit and more purification of sound.

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**TO REDUCE THE RISK OF ELECTRIC SHOCK,  
DO NOT REMOVE COVER.  
NO USER-SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

### **IMPORTANT SAFETY INSTRUCTIONS**

- All safety and operating instructions should be read before the product is operated, and retained for future reference.
- This product should be operated only from the type of power source indicated on the back of the unit. If you are not sure of the type of your mains power supply, consult your dealer or local power company.
- To completely disconnect this product from the AC mains, disconnect the power supply cord plug from the AC receptacle.
- Do not use the product near water, i.e. near a bathtub, kitchen sink, laundry tub, in a wet basement, near a swimming pool etc.
- Do not install the product near heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat. See "Placement and Cabling" on page 6.
- Do not let objects or liquids fall into the product. Do not expose the product to dripping or splashing. Do not place a vessel containing liquid on top of the product.
- Clean only with a soft, dry cloth.
- Do not attempt to service this product yourself. Opening or removing covers may expose you to dangerous voltage. Refer all servicing to authorized service personnel. See "Service" on page 12.

## Warranty

AURALiC offers a 90-day factory warranty from the date of purchase that can be extended to a 3-Year limited warranty. This non-transferable warranty is available to the original owner by completing the product registration form including the original sales information from your authorized AURALiC dealer within 30 days of purchase. You could either use the online registration form on our website ([www.auralic.com](http://www.auralic.com)) or fill 'AURALiC Product Registration Form' on page 17 and send it back to your dealer to finish the registration.

Warranty coverage includes all parts and labors. Warranty is void if damage is due to abuse, neglect or unauthorized modification. Cost associated with the return of this product is the sole responsibility of the owner. All repair work must be done by AURALiC or by an authorized AURALiC repair agency. Work done by unauthorized persons will void any and all warranty coverage.

AURALiC products are uniquely identified with a serial number (S/N) on the back of the unit. This number is required to validate your warranty. Please reference your serial number if service is required.

Before the product can be returned for service, an RMA (Return Material Authorization) number must be issued by AURALiC. Contact your dealer or AURALiC for further information. Units without an RMA number will not be accepted for service.

## Unpacking

Please confirm that the following items are in the box:

- TAURUS PRE
- AURALiC Universal Remote Control
- AC Power Cord
- User's Guide

Carefully unpack each piece, if there is any damage, or if anything is missing, please contact your dealer or AURALiC.

**ONLY SHIP THIS PRODUCT IN ITS ORIGINAL PACKING!**

Please be sure to retain the original shipping carton and all packing materials as they are specially designed to protect the unit during transportation or shipping.

# Placement and Cabling

## Placement

TAURUS PRE should be placed on a solid and stable surface with good ventilation. Do not install this product near any heat sources such as radiators or other product (such as amplifiers) that produce heat. Site the product so that its location or position does not interfere with its proper ventilation. For example, it should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built in installation such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

### **Ventilation Requirement**

TAURUS PRE dissipates up to 25 Watts of power during normal operation. It should be installed in a space with at least five inches of clearance above; one inch behind and on both sides of its enclosure to provide adequate ventilation. Avoid placing it directly above other equipment that produces heat.

## Check Your AC Mains Voltage

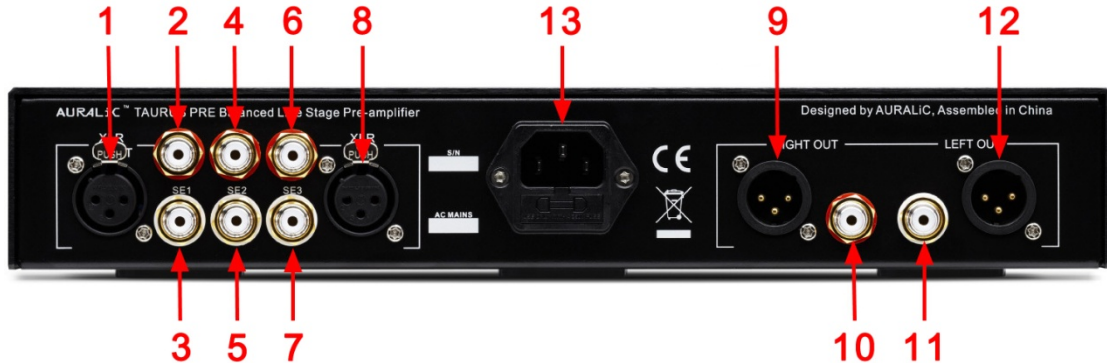
TAURUS PRE is shipped with its mains voltage preset for operation in the destination country. The mains voltage setting is written on the back of the unit, left besides power cord socket. Mains voltage setting is not intended to be changed by the user. If it needs to be changed, contact your dealer or AURALiC.

The power cord has a three-wire grounding type plug (a plug having a third pin for grounding). It will only fit into a grounding type power outlet. If you are unable to insert the plug fully into the outlet, contact your dealer or AURALiC. Do not defeat the safety purpose of the grounded type plug.

**TAURUS PRE MUST BE USED WITH CORRECT  
MAINS VOLTAGE AND PROPERLY EARTHED!**

## Cabling

The I/O ports on the back of the unit are shown as following:



1	Right Balanced Analog Input	8	Left Balanced Analog Input
2	Right #1 Single-Ended Analog Input	9	Right Balanced Analog Output
3	Left #1 Single-Ended Analog Input	10	Right Single-Ended Analog Output
4	Right #2 Single-Ended Analog Input	11	Left Single-Ended Analog Output
5	Left #2 Single-Ended Analog Input	12	Left Balanced Analog Output
6	Right #3 Single-Ended Analog Input	13	AC Mains Power Cord Socket
7	Left #3 Single-Ended Analog Input		

Please be sure to power off all units in your system before any cabling job, failed to follow this instruction may result in permanent damage to the device and void any warranty.

**ALWAYS POWER OFF TAURUS PRE BEFORE CABLING!**

- **Analog Inputs**

The balanced and single-ended analog inputs are individually buffered, however, it is still strongly recommended to disconnect unused ports to avoid any potential electromagnetic interference induced by cable.

The gain of RCA and XLR inputs are 16dB and 10dB with a maximum allowed level at +18dBu and +24dBu. Please be sure to use a source component with its output level within this range.



Since the input impedance of the RCA and XLR ports are designed to be very high (100K@RCA / 200K@ XLR) to capture music details from the source, we recommended you to use shielded interconnect cable to avoid noise pick-up from the environment.

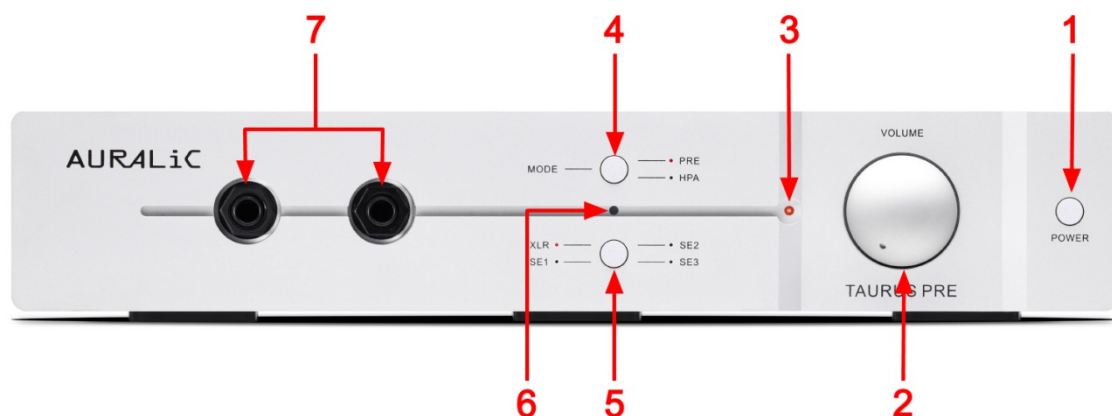
- **Analog Outputs**

TAURUS PRE provides high level, low distortion audio signal to your power amplifier though its analog outputs with maximum swing voltages at 24dBu and 30dBu on RCA and XLR outputs. The XLR outputs are wiring with PIN 2 as hot and RCA outputs at absolute phase. The measurements indicate TAURUS PRE can easily drive 600ohm load at rated level without any performance degradation.

**NEVER SHORT ANY OUTPUTS OF TAURUS PRE TO GROUND INCLUDING THE HEADPHONE OUTPUTS. FAILED TO DO THAT WILL DAMAGE UNIT PERMANENTLY AND WILL VOID ANY WARRANTY!**

## Operation

The front panel of TAURUS PRE is shown as following:



1	Power Switch	2	Volume Control Knob
3	Power LED	4	Mode Control Switch
5	Input Channel Switch	6	Remote Control Sensor
7	2*6.35mm Stereo Headphone Jack		

## Power On/Off

As soon as you have plugged the power cord, TAURUS PRE will be in deep standby mode with power dissipation at about 0.5 Watt, you can power on and off the unit by pressing the tactile switch 'POWER' on the front panel.

The Power LED indicates current work status of TAURUS PRE:

- LED off: Power off
- LED light: Ready to work

## Volume Control

The volume control allows you to increase or decrease the output level of analog outputs and headphone jacks from -80dB to maximum.

## 6.35mm Stereo Headphone Jacks

TAURUS PRE is designed to well match most modern dynamic headphones via two 6.35mm stereo headphone jacks (TRS jack). Please make sure the plug is seated for a solid connection.

**Don't use mono 6.35mm plug (TS plug)!**

A mono 6.35mm plug (TS plug) will create a short connection; this will result in damage of unit and void warranty coverage! Double check that you use 6.35mm stereo plugs when you connect headphones.

## Input Control

The input control switch allows you to choose the music source between XLR and 3 pairs of RCA inputs. Though all inputs are individually buffered and switched by relays, we recommend you only connecting necessary inputs to avoid any potential electromagnetic interference induced by cable.

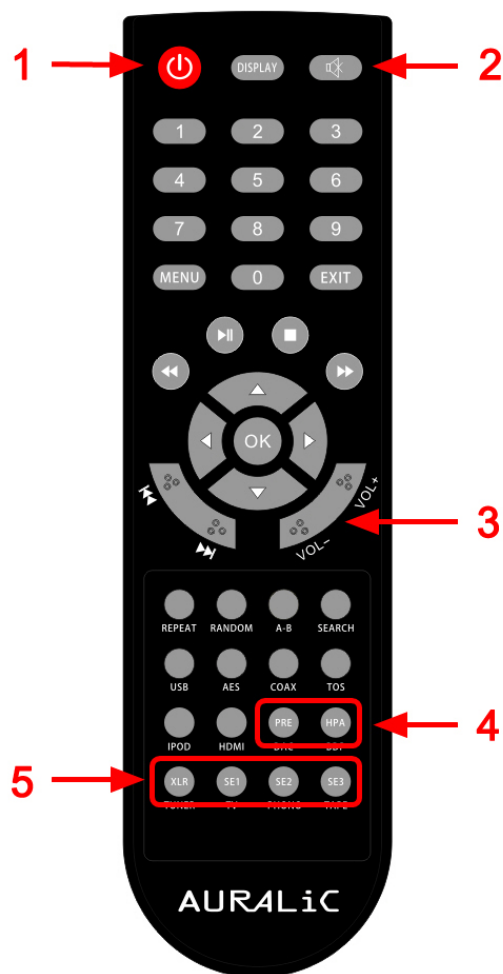
## Mode Control

The mode control switch enables you to set TAURUS PRE as pre-amplifier or headphone amplifier. In PRE mode, TAURUS PRE will disconnect the headphone jacks on the front panel to avoid any damage on connected headphones when you try to listening at large

sound pressure level on your loudspeakers. In HPA mode, it will disconnect all analog outputs on the back to ensure the best sonic quality on headphone jacks.

## Operation with Remote Control

TAURUS PRE can be operated by AURALiC's universal remote control. The button function groups are as following:



1	Power On/Off
2	Master Mute and Unmute
3	Volume Up and Volume Down
4	Operation Mode Control
5	Input Channel Control

## Burn-in period and Warm-up

As the same with the other audio components, TAURUS PRE requests at least 100 hours music signal burn-in to achieve its designed performance; the sonic will be in best after 500 hours music signal burn-in.

Since TAURUS PRE is working in Class-A, it need regular warm-up before it can sound best for enjoyment. The warm-up time depend on room temperature which should between 30 to 60 minutes.

# Maintenance & Service

## Maintenance

TAURUS PRE does not require regular maintenance in normal use. However, there are a few things that will help to keep it in good operating and cosmetic condition:

### Cleaning

Only clean the enclosure with a soft, dry cloth.

### Extended Nonuse

Disconnect TAURUS PRE from mains power when it will be left unattended or unused for an extended period of time.

## Service

If your TAURUS PRE encounters a problem, contact your dealer or AURALiC. Do not void the warranty by allowing unauthorized personnel to attempt repairs. Do not attempt to service the product yourself. Opening the cover may expose you to dangerous voltage, as well as void the warranty.

Before TAURUS PRE can be returned for service, an RMA (Return Material Authorization) number must be issued by AURALiC. Contact your dealer or AURALiC for further information.

## Contact

If you have any question, please feel free to contact our technical support department:

AURALIC LIMITED  
B406, No.11 East Shixing Street  
Shijingshan District, Beijing, 100041  
China

[support@auralic.com](mailto:support@auralic.com)  
[www.auralic.com](http://www.auralic.com)

# Troubleshooting

## No Power

- Examine the power cord to be sure that it is connected to both the AC mains connector and an AC wall outlet.
- Try substituting another power cord.
- Check the AC mains voltage setting on the back of the unit and see if it is according to your local power voltage.

## No Sound or Low Output

- Examine all cables to ensure a solid connection between the TAURUS PRE and associated components.
- Make sure you have selected the right input and output ports.
- Make sure all associated components are powered on and not muted.
- Make sure all associated components connected to the selected input are producing an audible input signal.

## Distorted or Partial Sound

- Check the cables between the TAURUS PRE and associated components, making sure all connections are good and sound.
- Check out the output level of your source component and make sure it will not overdrive TAURUS PRE's input by delivering signal level below allowed level.

## Noise/Hum

- Check the input cables between TAURUS PRE and associated components, making sure all connections are good and sound.
- Make sure the input cables between the TAURUS PRE and sources component are not routed near AC cables, power transformers, or other EMI inducing devices.
- Try to use high quality interconnect cable with full ground shield.
- Try to plug TAURUS PRE and associated components with different AC main socket to avoid ground loop induced hum noise.

## Specifications

<b>Frequency Response</b>	<ul style="list-style-type: none"> <li>● 3Hz - 300KHz, +/- 3dB</li> <li>● 20Hz - 20KHz, +/- 0.1dB</li> </ul>
<b>THD+N</b>	<0.005%, 20Hz-20KHz
<b>Dynamic Range</b>	>130dB, 20Hz-20KHz, A-weighted
<b>Crosstalk</b>	<-80dB at 1KHz
<b>Gain</b>	<ul style="list-style-type: none"> <li>● +16dB on RCA inputs</li> <li>● +10dB on XLR inputs</li> </ul>
<b>Input Ports</b>	<ul style="list-style-type: none"> <li>● 3 x RCA: undistorted level +18dBu</li> <li>● 1 x XLR: undistorted level +24dBu</li> </ul>
<b>Output Ports</b>	<ul style="list-style-type: none"> <li>● 1 x RCA pre-amplifier out</li> <li>● 1 x XLR pre-amplifier out</li> <li>● 2 x 6.35mm headphone out</li> </ul>
<b>Max. Swing Voltage</b>	<ul style="list-style-type: none"> <li>● +24dBu on RCA outputs</li> <li>● +30dBu on XLR outputs</li> </ul>
<b>Power Dissipation</b>	25 Watts at max.
<b>Dimension</b>	11"W x 9"D x 2.6"H (33cm x 23cm x 6.5cm)
<b>Weight</b>	10.5 lbs (4.8kg)

*All specifications are subject to change without notice.*

# EC Declaration of Conformity

AURALIC LIMITED declares this product is in conformity with the Low Voltage Directive 73/23/EEC and Electromagnetic Compatibility 89/336/EEC as amended by 92/31/EEC and 93/68/EEC.

The conformity of the designated product with the provisions of Directive number 73/23/EEC (LVD) is proved by full compliance with the following standards:

EN60065 2002 General requirements

The conformity of the designated product with the provisions of Directive number 89/336/EEC (EMC) is proved by full compliance with the following standards:

EN55013 2001 Conducted emissions

EN55013 2001 Absorbed emissions

EN55020 2002 Immunity





## AURALiC Product Registration Form

<b>Owner Information</b>	
<b>Your Name</b>	
<b>Street Address</b>	
<b>City</b>	
<b>Zip Code</b>	
<b>Country</b>	
<b>Email</b>	
<b>Telephone</b>	
<b>Product Information</b>	
<b>Product Type</b>	
<b>Serial Number</b>	
<b>Dealer Name</b>	
<b>Purchase Date</b>	
<b>Purchase Price</b>	
<b>Currency</b>	

