Audio Note

P4
Balanced
Tonmeister

MONO
POWER AMPLIFIERS

OWNER'S INFORMATION

Audio Note

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! IMPORTANT SAFETY INFORMATION !



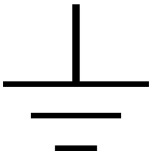
RISK OF SHOCK OR ELECTROCUTION! INTERNAL OPERATING VOLTAGES ARE LETHAL!

Do not remove top cover, unless specifically instructed to do so in the user manual.

This unit contains fuses and other safety components in accordance with BS60065 requirements.
In the event of failure, replacement fuse or safety component must be of the same part type and value.

SUCH REPLACEMENT MUST ONLY BE CARRIED OUT BY A QUALIFIED SERVICE TECHNICIAN.

Do not attempt to replace any fuses without first disconnecting the unit from the mains electricity supply.



This product must be earthed – ensure that the mains supply cable earth / ground is correctly connected.



This product generates high levels of heat. Adequate ventilation must be provided. Do not restrict airflow through any ventilation slots or place the unit on any surface that may restrict airflow.

Valve equipment operates at extremely high temperatures;
KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.



Do not store or operate this unit in areas of high humidity or in close proximity to water / moisture.

Do not expose or immerse the unit in liquid of any kind.

OTHER SAFETY PRECAUTIONS: -

Never touch the power cord with wet hands.

Always remove the power cord by grasping the plug, not the cable.

Never expose the unit to excessive heat or magnetism.

Never let an inexperienced person repair or reassemble the unit.

Never put anything, especially metal objects, inside the unit.

Never place excessive weight on the unit.

CE DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents:

BS EN 60065 in accordance with the regulations 73/23/EEC, 89/336/EEC (from 1 January 1997)

CE 94

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DISPOSAL

This product must not be disposed of as normal household waste. To prevent possible harm to the environment please separate the product from other waste to ensure that it can be recycled in an environmentally safe manner. Please contact your retailer or the appropriate local government office for collection facilities.

POWER REQUIREMENTS

Power requirements for electrical equipment vary depending on your geographical location. Please ensure that your unit meets the power requirements in your area. The power requirement for your unit is marked on the serial number plate, located on the rear panel.

If you are in doubt, please contact your dealer before connecting the unit to the mains supply.

INTRODUCTION

Thank you for purchasing this Audio Note (UK) product. With the correct care it should give you many years of pleasure and enjoyment.

Please take the time to read all of the information in this manual before connecting your new component to an electrical supply or your system, to ensure both your safety and satisfaction.

Please note that due to our desire to continually improve products, specifications are subject to change without notice. Therefore it is important to refer to the manual that is supplied with your product for the most accurate information; manuals downloaded from our website or obtained from other sources may no longer fully apply to your product.

If you have any questions regarding the information contained within this document or your new component, please feel free to contact us: -

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Audio Note (UK) Ltd

Audio Note

P4 BALANCED TONMEISTER

Congratulations on your purchase of the Audio Note (UK) P4 Balanced Tonmeister Mono Power Amplifiers.
They are Pure Class A valve amplifiers that use a pair of the highly regarded 300B directly heated triode valves in Parallel Single Ended configuration, producing a level of performance that is radically superior to the vast majority of current designs.

They have been specifically engineered for sonic performance rather than technical specification, and fulfill all Audio Note (UK) Level 3 criteria: -

Pure Class A operation
Zero Negative Feedback
Parallel Single Ended Output Stage
Valve Rectification
Directly Heated Triode operation
Materials and component quality

The P4 Balanced Tonmeister are the latest version of our classic P4 300B Parallel Single Ended Triode stereo power amplifiers. The circuit has been completely redesigned and is now a beautiful example of elegant simplification, something that could only be realised thanks to our ability to create extremely closely matched transformers in-house, and having our own supply of custom resistors, in-house made foil capacitors and custom made electrolytic capacitors. These allow us to have extremely tight control over the performance and voicing of the complete amplifier from input to output, something that is simply beyond the possibilities of manufacturers who have to rely on 'off the shelf' components.

The result is a pair of amplifiers that maintain the legendary musicality, midrange magic and glorious tonal colour of the original P4s, whilst bringing new and previously unheard levels of information retrieval and dynamic expression, redefining what is usually expected of a 300B PSE amplifier.

The P4 Balanced Tonmeister amplifiers feature the following components: -

In house designed and manufactured Audio Note (UK) SHiB copper / copper interstage and output transformers
Audio Note (UK) IHiB copper / copper PSU Choke and mains transformers
Copper internal wiring
Audio Note (UK) AN-Vx silver interconnect cable used for signal wiring
Audio Note (UK) Copper signal capacitors
Audio Note (UK) STD and KAISEI Non-Polar Electrolytic Capacitors used in critical areas
Audio Note (UK) 2W Magnetic and Non-Magnetic Ni-Chrome resistors
Audio Note (UK) 2W Niobium resistors
Audio Note (UK) 36 Step Stereo Non-Magnetic Ni-Chrome Resistor Volume Attenuators

UNPACKING AND INSTALLATION

Please take care when unpacking your P4 Balanced Tonmeister Amplifiers. Choose a clean, clear location to unpack the units. Be aware that the amplifiers are very heavy; before attempting to unpack or lift them, check their weight and if necessary use more than one person so that they can be moved safely and easily.

We recommend that you retain and carefully store all of the original packing materials, in case transportation / shipping is required at a later date.

Select a suitable location for the amplifiers. This should be a dry, dust free and level area, preferably shielded from direct sunlight and free from vibration. Also ensure that the location is stable and capable of carrying the combined weight of the units.

A suitable mains power outlet must be close to the location; power cables must not be pulled or stretched tightly in an attempt to reach a wall socket. If the power cable will not easily reach the socket, choose a closer location!

Please ensure that adequate ventilation for the amplifiers is provided, and that airflow through any ventilation slots in the chassis are not restricted. We recommend a distance of at least 30cm free space is maintained above the unit. Please also remember that valve equipment operates at extremely high temperatures, so a position that is inaccessible to any children or animals is essential.

VALVE INSTALLATION

The amplifiers are shipped without the 4 x 300B output valves (2 x per chassis) and the 2 x 5U4GB PSU valves (1 x per chassis) installed. It is necessary to install these valves before the amplifiers can be connected to the mains supply and operated.

It is essential that the valves are installed correctly or ***serious damage that is not covered by the warranty will result*. We recommend that your dealer perform this procedure for you if you are in any way unsure.**

FIRSTLY, ENSURE THAT THE AMPLIFIERS **ARE <u>NOT</u> CONNECTED TO A MAINS ELECTRICAL SUPPLY,** AND THAT THE POWER CABLES **ARE <u>NOT</u> CONNECTED TO THE AMPLIFIERS.**

Using a No.2 pozidrive® screwdriver, remove the 6 x screws for the top and 7 x screws for each side of the top covers.

Now remove the 6 valves that are packed with the amplifiers. Also inspect the insides of the amplifiers to check that nothing has become damaged during transit, including the remaining smaller valves, located in valve sockets '1' (consult the drawing on the next page). Ensure that these valves are seated correctly in their valve bases.

For reference, these valves are as follows: -

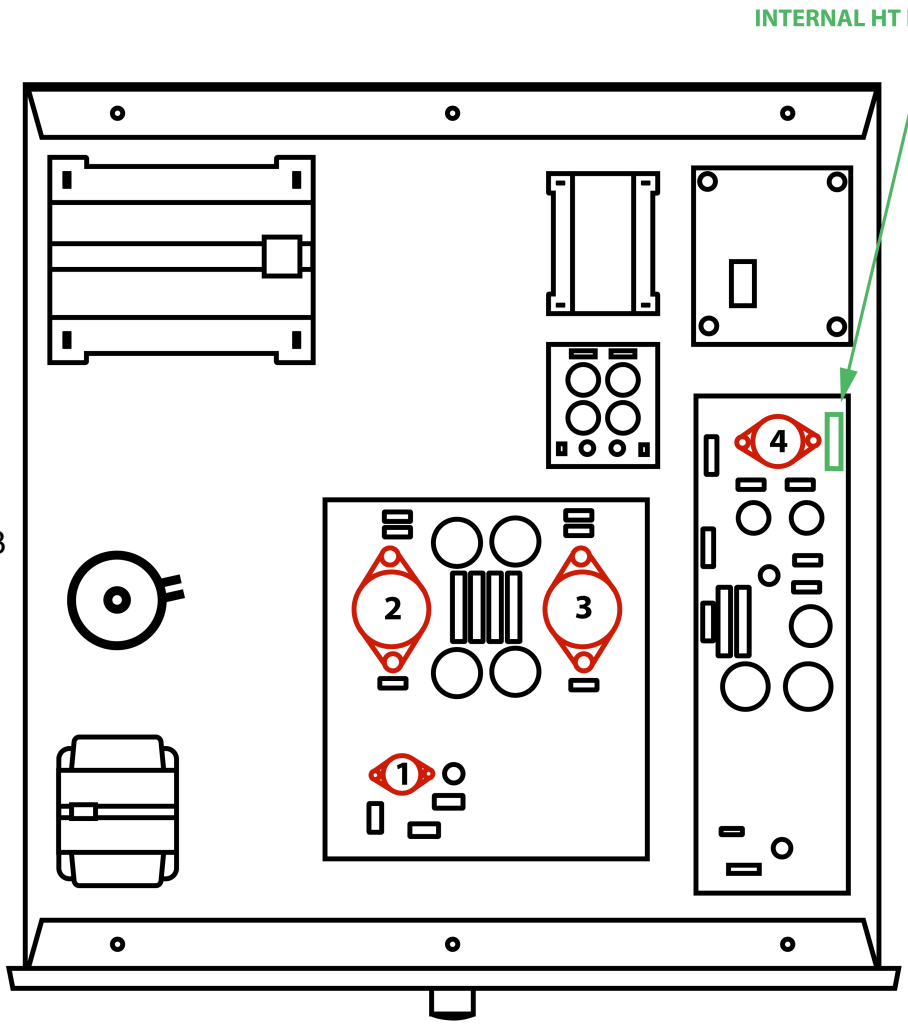
Socket 1; 5687

Carefully unwrap the 6 large valves. You will find the following: -

4 x 300B valves (2 x per chassis)
2 x 5U4GB valve (1 x per chassis)

Once again, please understand that it is absolutely vital these valves are fitted correctly.

VALVE INSTALLATION Continued…



VALVE 1; 5687
VALVE 2; 300B
VALVE 3; 300B
VALVE 4; 5U4GB

Look at the drawing of the internals of the P4 Balanced Tonmeister and familiarize yourself with the positions of the various valves. First install the **300B** valves, which should be inserted into sockets '2' and '3', located at the rear of the main central circuit board.
Inspect the bottom of a **300B** valve and the corresponding valve base on the circuit board. You will notice that two of the pins are of a larger diameter than the other two; this is to help ensure that the valve can easily be inserted correctly.

The larger pins must face towards the FRONT of the amplifier when each valve is inserted into the appropriate valve base.

With gentle but firm pressure insert the valve into its socket. Check again that both valves are fully inserted correctly.

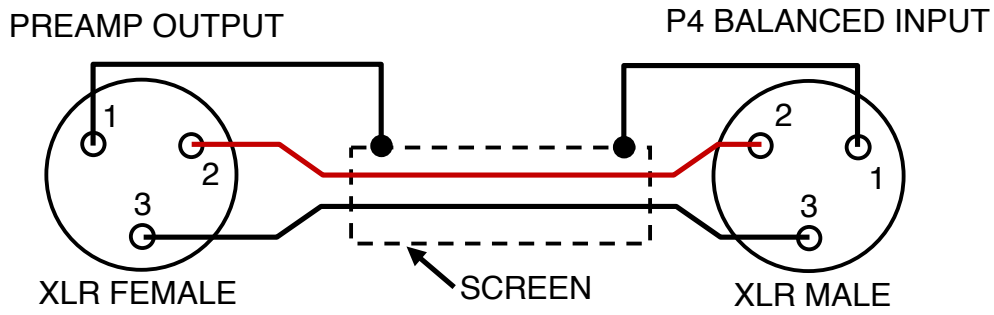
Next, insert the **5U4GB** valve into socket '4', located at the rear of the PSU circuit board, on the right hand side of the amplifier. Locate the rib on the central pin of the valve and align with the valve base (it can only be inserted one way due to this locating rib) and with gentle but firm pressure insert the valve.

Check once again that all valves are correctly installed and then replace the top covers.

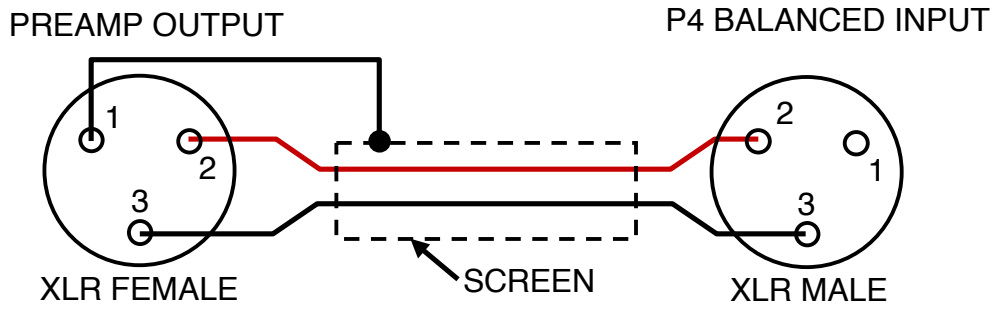
CONNECTION

Inputs The P4 Balanced Tonmeister amplifiers are fitted with a single XLR / Balanced input socket on each chassis. Looking from behind the amplifier, they are located at the upper right hand side of the rear panel (viewed from the rear). Connect the outputs from your preamplifier to these inputs.

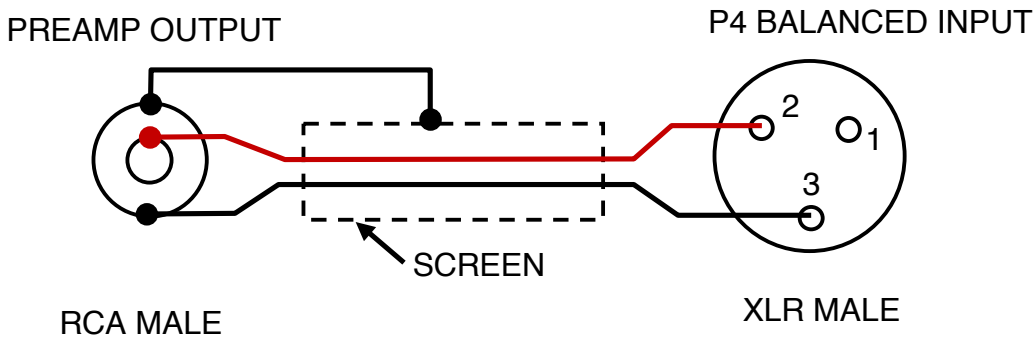
CABLE CONFIGURATION OPTIONS



CONVENTIONAL: SCREEN CONNECTED AT BOTH ENDS



SCREEN CONNECTED AT PREAMP SIDE ONLY, TO ELIMINATE GROUND LOOPS



CABLE CONFIGURATION FOR RCA SINGLE ENDED PREAMP OUTPUT TO XLR BALANCED AMPLIFIER INPUT

CONNECTION continued…

Speakers Each amplifier is equipped with 3 colour coded binding posts for connection to your speakers.
Looking from the rear of the amplifier, the 3 binding posts are located at the centre of the rear panel.

Connect the amplifier's black speaker output binding posts marked as "0" to the black / negative terminal (also marked " – ") on the loudspeakers.
Connect the amplifier's red speaker output binding posts marked "8 Ohm" to the red / positive terminal (also marked " + ") on the loudspeakers.
The other red output binding post is marked "4 Ohm" and may be used with 4 Ohm speakers.
If you are uncertain of the impedance of your 'speakers, compare the sound quality using a familiar recording with the speakers connected to the 8 Ohm connections and then the 4 Ohm connections. The combination that produces the best frequency balance and maximum dynamics should be used.

Ground Post A ground post is provided for connection to those source components that also use a separate ground terminal.

Mains Each P4 Balanced Tonmeister amplifier is equipped with an IEC 320 mains inlet socket, located at the top / left hand side of the rear panel. Use the supplied mains cables to connect the units to the local mains supply.

Fuses A protection fuse is mounted in the circular fuse holder on the rear panel of each amplifier, to the right of the power switch. There is also an internal fuse, mounted beside the 5U4GB rectifier valve on the PSU board. These fuses are for your own protection and will operate only in the event of an electrical issue with the unit. Fuses can fail for a variety of reasons and it is not necessarily the sign of a fault if a fuse should blow. Momentary mains electrical issues can cause a fuse to operate / blow for instance, as can a valve that momentarily draws more current than usual at switch on.

The fuses are user-replaceable and should only be substituted with **EXACTLY THE SAME VALUE AND SPECIFICATION as the factory installed example.**

We DO NOT RECOMMEND OR SUPPORT THE USE OF ANY KIND OF 'AUDIOPHILE' FUSES. Damage to the unit caused by the use of such products will not be covered under warranty.

Fuse values are as follows
***Only use 'Timed / Slow Blow' fuses of the correct value for your local mains voltage*: -**

110 / 120V; = 2A Timed / Slow Blow (internal HT fuse, 400mA)

230 / 240V; = 1.6A Timed / Slow Blow (internal HT fuse, 400mA)

OPERATION

Once all the connections are completed and checked, ensure that the volume control of your preamplifier / source is at the minimum setting.

Turn on all components in the signal chain BEFORE the P4 Balanced Tonmeister amplifiers; they should always be the LAST component to be switched ON, and the FIRST to be switched OFF.

Turn on the amplifiers by using the switch located on the rear top left of the back panels, just above mains inlet socket.

Volume Control

Each P4 Balanced Tonmeister is equipped with a volume control, located on the front panel. This can be used to adjust the overall level of system gain, and allow for the preamplifier volume control to be used in its best performing region of travel, which is usually towards the middle of the control's rotation. Initially set the volume controls to their mid position (12 o'clock) and test to see if this provides enough adjustment in combination with the preamplifier volume control.

Bedding in

The new amplifiers require about 100 hours of initial use (called "bedding in") before the circuitry becomes fully stable and optimum performance is realized.
As the amplifiers "bed in" the sound will become increasingly smoother, natural, and open.
Once the amplifiers have "bedded in" a warm up time of approximately 30 to 45 minutes is required each time the amplifiers are switched on before optimum sonic performance is reached.

Cleaning

No special maintenance is required for the amplifiers. Use a soft, clean lint free cloth to remove any surface marks from the casework. For finger marks / grease, use a soft, clean lint free cloth, lightly moistened with a solution of warm water and mild detergent. Do not use any alcohol or solvent based cleaning products, as they may damage the finish of the amplifiers.

ENSURE THAT THE AMPLIFIERS ARE SWITCHED OFF AND DISCONNECTED FROM THE MAINS ELECTRICITY SUPPLY BEFORE UNDERTAKING ANY CLEANING.

Valve Life

The valves supplied with your amplifier should provide approximately 6000 hours of operation. They are specially selected by us, and should only be replaced with matched pairs. Please consult your Audio Note (UK) dealer should your valves need replacing.

TECHNICAL SPECIFICATIONS

INPUT IMPEDANCE	2.4K Ohm, line level
INPUT SENSITIVITY	1V for full output
MAXIMUM OUTPUT	18 watts RMS per channel into 4 or 8 Ohm loads
CHANNEL BALANCE	+/- 0.3dB
VALVE COMPLEMENT	2 x 5U4G (1 x per chassis) 4 x 300B (2 x per chassis) 2 x 5687 (1 x per chassis)
UNIT WEIGHT	24KG (per chassis)
SHIPPING WEIGHT (ORIGINAL PACKAGING)	28KG (per chassis)
UNIT DIMENSIONS	220mm (h) x 460mm (w) x 530mm (d)
SHIPPING DIMENSIONS (ORIGINAL PACKAGING)	410mm (h) x 660mm (w) x 680mm (d)
MAINS INPUT	AC 100-120V/220-240V 50/60 Hz
MAINS FUSE	2A Anti Surge (110/120V Supply) 1.6A Anti Surge (200/240V Supply)
INTERNAL HT FUSE	400mA (110v-240v Supply)
MAX. POWER CONSUMPTION	200 Watts
NOTE	Due to Audio Note (UK)'s ongoing research and development program, specifications are subject to change without notice.

WARRANTY INFORMATION

Audio Note (UK) warrants this product to be free from defects in materials and workmanship for two years from the original date of purchase from an appointed Audio Note (UK) dealer, and agrees to cover 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, Audio Note (UK) will, at its discretion, repair or replace the item free of charge within a reasonable time once it has been returned to Audio Note (UK) or an appointed Audio Note (UK) dealer or service engineer.

Audio Note (UK) is not liable for any shipping charges incurred whilst transporting the product to or from Audio Note (UK) or an appointed Audio Note (UK) 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 explaining, 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 that your product is insured during transit.

Any servicing, repairs or modifications not authorized by Audio Note (UK), or carried out by persons other than appointed Audio Note (UK) service engineers will invalidate any warranty.

This Warranty does NOT cover: -

Damage sustained whilst in the possession of a shipping agent, retailer or consumer and not caused as a direct result of 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.

Audio Note (UK) reserves the right to refuse warranty for any component of which the serial number has been removed, defaced or tampered with.

CONTACT INFORMATION

If in the future your Audio Note (UK) product requires servicing, or if you require technical support or have any questions regarding this or any of our other products, please contact your local Audio Note (UK) dealer.

Alternatively, please feel free to contact us directly: -

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