puresound

A10 Line Integrated Amplifier

The Pure Sound A10 was developed to meet a need for a compact and relatively affordable Class A amplifier that would be compatible with high quality, high sensitivity loudspeakers. The A10 is a line level integrated design that allows for the selection of 2 different source components and control of the volume via a high quality film potentiometer. Class A operation was chosen because it gives lower distortion and a more relaxing, natural sound.

The amplifier uses the 6P14 output valves (an equivalent of the EL84/6BQ5) in an Ultra Linear push pull configuration. This arrangement gives a combination of power and clarity that is difficult to beat. There is a charming quality about the way this family of pentodes reproduce music. The amplifier uses an Auto Bias system, which means that replacement output valves should be fitted as matched pairs. There will be no need to reset or monitor bias conditions.

Very high quality components are used throughout including selected carbon film resistors and polypropylene signal coupling capacitors. All of the input sockets and speaker terminals are gold plated to ensure good quality electrical contact in the long term.

The output can be configured for use with 4 or 8 Ohm loudspeakers.

The A10 may also be used as a very high quality stereo power amplifier if the volume control is turned up fully.

FEATURES

Ultra Linear push pull output stage using 6P14's in Class A
Wide band output transformers using Z11 silicon steel laminations and 6N copper wire
Japanese Rubycon power supply capacitors
Evox Rifa signal coupling capacitors
Carbon film resistors
ALPS volume potentiometer
24K gold plated phono sockets & speaker terminals
30mm Sandalwood fascia panel
24 K gold plated brass control knob

SPECIFICATION

Output Power 10W per channel (ultralinear coupled)
Frequency Response 30Hz-60KHz (-1dB)
Signal/Noise 89 dB
THD 0.3% @ 6 Watts output
Input Sensitivity 500mV to full output
Power Consumption 90 W
Output Taps 4 and 8 ohms
Input impedance 100Kohms
Dimensions 330 x 230 x 140 mm (wxdxh)
Valve Complement 6N3 (5670) x 2, EL84 (6P14) x 4
Weight 11 Kg

Further information at www.puresound.info
Pure Sound
Tel +44 (0) 1822 612449
Fax +44 (0) 1822 612449
Email : info@puresound.info

puresound

A30 Line Integrated Amplifier

The Pure Sound A30 amplifier was developed to meet the demand for an affordable Class A amplifier that would be compatible with all types of loudspeakers. The A30 is a line level integrated design that allows for the selection of up to 3 different source components and control of the volume by a high quality ALPS Blue Velvet potentiometer. Class A operation was chosen because it gives lower distortion and a more relaxing, natural sound.

The amplifier uses the very robust Electro Harmonix 6550 output valves in an Ultra Linear Push Pull configuration. This arrangement gives a combination of power and clarity that is difficult to beat. The amplifier uses an Auto Bias system, which means that replacement output valves should be fitted as matched pairs. There will be no need to reset or monitor bias conditions.

Very high quality components are used throughout including selected carbon film resistors and SCR polypropylene capacitors. The power supply makes use of twin valve rectifiers and choke smoothing.

The output can be configured for use with 4 or 8 ohm loudspeakers.

The Pure Sound A30 may also be used as a very high quality stereo power amplifier if the volume control is turned up fully. When partnered with appropriate ancillary equipment the A30 is capable of very satisfying performance.

Pure Sound +44 (0) 1822 612449 ` **info@puresound.info**

Why this amplifier? Why now?

With the recent interest in lower powered Single Ended triode amplifiers has come the realization that to get the best from these, the speakers used have to be both sensitive and quite large to give truly satisfying results. There are also not that many good, high sensitivity (>97 dB/W) designs available at any price never mind at price levels the majority of music lovers can afford. However, there are some very good loudspeakers currently being made with sensitivities between 88 and 94dB/W. These are sufficiently revealing to make the virtues of simple, high quality amplification readily apparent, although in most cases the output of a typical single ended amplifier is insufficient to give the scale and drama many types of music demand.

A good amplifier with 25 -30 watts of output power is more than enough to drive this type of loudspeaker to sensible levels even in quite a large room. For circuit simplicity, a valve amplifier is preferable. Recently, there has been an increase in the number of relatively affordable valve amplifiers made in China. Many of these are compromised by the quality of their transformers, components, layout and because they operate in Class AB or B to give a higher power specification. They often also use a lot of negative feedback in an attempt to compensate for these shortcomings with a consequential impact on clarity and low frequency control.

For some 10 years there has been a lack of affordable Class A valve amplifiers. The Pure Sound A30 operates fully in Class A up to its rated output so it does not change character at any signal level. There is none of the distortion caused by output devices switching on and off and therefore no requirement for excessive feedback to correct for it. The 6550 valves supplied are the extremely robust Russian Electro-Harmonix variety and are quite content with dissipating the power required to maintain Class A operation up to 30 Watts. The valve rectifiers used keep the high voltage power supply clear of the noise that can be introduced by silicon rectifiers. A substantial choke is also incorporated to keep the power supply impedance low. The output transformers also give extremely wide bandwidth allowing very solid low frequency performance as well as exceptional reproduction of timbre.

These design features combined with the use of high quality passive components, octal based input and driver triodes and an elegant but simple internal layout results in an amplifier which sets a new benchmark for performance, build quality and value.

SPECIFICATIONS

Power output (Class A operation)	30 Watts/ch Ultra Linear, 18 Watts/ch Triode Coupled
Frequency Response 20Hz - 20kHz	-0.25 to -0.3 dB
THD	0.3%
Input Impedance	100 KOhm
S/N ratio	88 dB
Input sensitivity for 0dB	100 mV
Power Consumption	260 Watts
Net Weight	61 lbs / 28 Kg
Dimensions (mm)	436 W x 360 D x 190 H
Inputs	3. Line Level
Outputs	4 & 8 Ohm
Valve Complement	4 x 6550, 2 x 5Z4P, 2 x 6n9P (6SL7), 2 x 6n8P (6SN7)

puresound

2A3 Line Integrated Amplifier

The earliest audio amplifiers made use of small, 3 element valves known as directly heated triodes. For many, the simple circuits that can be built around such devices better preserve the structure, colour and feeling within the music than any other circuit topology. One of the best sounding triodes, the 2A3, is in production again and its characteristic linearity has been employed in a novel configuration to create a particularly charming amplifier. The Pure Sound 2A3 is an 18 Watt per channel line level integrated design that allows for the selection of up to 3 different source components and control of the volume by a high quality ALPS Blue Velvet potentiometer.

There are many amplifiers now making use of directly heated triodes but few which adequately address the particularly awkward issues involved in driving these devices properly. The Pure Sound 2A3 amplifier features an unusual choke loaded driver stage which allows the 6SN7 driver valves to deliver the full measure of signal to the push/pull output valves. This rather exotic configuration usually results in a tremendous depth to the tone of instruments and the Pure Sound 2A3 is no exception in this regard.

Very high quality components are used throughout including selected carbon film resistors and SCR polypropylene capacitors. The power supply makes use of twin valve rectifiers and choke smoothing. The output can be configured for use with 4 or 8 ohm loudspeakers.

The Pure Sound 2A3 may also be used as a very high quality stereo power amplifier if the volume control is turned up fully. When partnered with appropriate ancillary equipment the Pure Sound 2A3 is capable of a very satisfying performance.

Pure Sound +44 (0) 1822 612449 info@puresound.info

SPECIFICATIONS

Output Power	18W per channel
Frequency Response	10Hz-82KHz (-1dB)
Signal/Noise	89 dB
THD	0.3%
Input Sensitivity	850mV to full output
Power Consumption	240W
Output Taps	4 and 8 ohms
Input impedance	100Kohms
Dimensions	436 x 350 x 190 mm
Valve Complement	6N8P x 4, 5Z4P x 2, 2A3 EH x 4
Weight	28 Kg

pure sound

P10 Phono Amplifier

The P10 phono amplifier is the latest addition to the highly acclaimed Pure Sound product range.
It is intended to meet the requirements of audio enthusiasts who still enjoy the distinctive strengths and high quality of reproduction that can be derived from vinyl records. It is compatible with moving magnet and high output moving coil cartridges. Low output moving coil cartridges will require the use of an additional step-up device or matching transformer. Full output from the P10 is sufficient to drive the line level inputs of any integrated amplifier or pre-amplifier.

The active amplification stages use double triodes in a simple anode follower configuration. The phono equalisation is achieved using passive components and can therefore maintain its accuracy over time without introducing the unacceptable levels of phase shift found in active equalisation stages. There is no negative feedback in the circuit.

The P10 features a particularly elaborate HT power supply. After the initial rectification and smoothing, the supply is split and two separate, heavily decoupled high voltage rails are established. These feed each half of the output valve while further decoupling of each rail allows the cleanest and most independent voltage rails possible to feed each half of the input valve. The absolute stability of this supply regardless of the demands made by the audio signal on the circuit, lends the P10 a stability and poise which allows effortless reproduction of the most demanding source material. The valve filaments are also fed by a DC supply thereby ensuring constant operating conditions for the amplifier.

The circuit makes use of close tolerance metal film resistors, polypropylene signal coupling capacitors and selected valves.

The P10 phono amplifier meets the very strict performance criteria required of all Pure Sound products and will give excellent results with vinyl records provided that it is used with appropriate ancillary equipment.

P10 SPECIFICATION

Input impedance	**47 Kohm**
Gain	**x100 (40 dB)**
Output impedance	**<5Kohm**
Power Consumption	**15 Watts**
Dimensions	**215W x 360D x90H (mm)**
Valve Complement	**ECC83 x 1, 6922 x 1**
Weight	**5 Kg**

Pure Sound +44 (0) 1822 612449 **info@puresound.info**

pure sound

T10 Moving Coil Transformer

It has been our experience that the best results are achieved when using moving coil cartridges loaded via a correctly matched transformer. The T10 contains two wide bandwidth, custom manufactured transformers with MuMetal cores. These have a have two pimary windings which can be switched to be connected in Series or in parallel. This arrangement offers a choice of ratios either 1:18 or 1:36 Almost all modern cartridges can be successfully loaded by one or other of the configurations. The optimum loading for the cartridge chosen can be readily found by ear.

The T10 impedance matching transformer meets the very strict performance criteria required of all Pure Sound products and will give excellent results with a wide variety of low output moving coil cartridges..

Pure Sound +44 (0) 1822 612449 **info@puresound.info**

pure sound

L10 Line Stage Pre-amplifier

Following the positive response to our flagship L300 pre-amplifier, ***pure sound*** has developed the L10, a new, more affordable design which incorporates much of the thinking that makes the L300 so highly regarded. The L10 has 4 inputs, a separate passive Record In Record Out loop and two pairs of single ended outputs. The circuit uses output transformers and a sophisticated full valve rectified, twin choke smoothed power supply. It also offers remote control of the volume via a separate handset.

A Line Stage pre-amplifier needs to offer the facility to select between different sources, to provide some means of attenuating the chosen source and then deliver it in an uncorrupted form to the power amplifier.

In recent times, with the prevalence of digital source components, many audio enthusiasts have adopted the use of passive volume controls incorporating resistive potential dividers and even transformer based attenuators. These are volume controls where attenuation is achieved through the use of tapped transformer windings. On the face of it either of these might appear to offer the purest approach. However, it's not so simple. Resistive attenuators are generally of quite a high impedance so as not to load the source driving them but in turn confer little drive capability themselves. In some circumstances they can sound quite transparent but it's a commonly experienced subjective impression, that such attenuators leave the music with a lack of purpose and grip. Long connecting cables may also blunt the high frequency response, a situation which may be worsened by using a following amplifier with low input impedance.

Transformer volume controls seem to address the issue of drive capability to some extent, but they have their own problems. A wide bandwidth transformer can be made such that, when using both windings in full, i.e. with no attenuation, it transfers a pretty good facsimile of the source signal. However, as attenuation is applied and the transformer has to transform more and more, difficulties start to arise. By the time significant attenuation is applied, the performance of the transformer no longer looks quite as impressive with differing patterns of resonance being visible at each step. The reproduction of timbre suffers and the sound quality realized alters slightly with each change in level. Auto-formers which attenuate by tapping off a single sided winding have actually proved to be the most transparent passive controls we have tested and yet even they seem to lack a certain something.

The other issue with volume controls based on a multi position switch is a sense that the right level for listening to a piece of music can never quite be reached. If the steps of the attenuator are made close enough to suit a source with a given output or a following amplifier with a particular sensitivity, it will be wrong with another source or another amplifier. A conventional potentiometer gives a much finer range of adjustment.

In the L10, source selection is via a high quality switch located near to the input sockets. The chosen source is routed to a high quality motorized, film potentiometer and from there on to the audio circuit. This consists of a single ended triode stage loaded by a custom wound wideband output transformer which steps down the amplified signal allowing it to be coupled to the power amplifier at a manageable level and as a low impedance source. The output stage of the L10 is impervious to long interconnecting cables or lower impedance power amplifier input stages.

A low gain, low output impedance line stage is in itself nothing new. Many transistor pre-amplifiers are similarly specified. However, they usually achieve it by means of excessive negative feedback which is highly detrimental to the subjective reproduction of music.

The L10 also incorporates an extremely sophisticated power supply to maintain constant operating conditions for the audio circuitry. It includes a valve rectifier, and a twin choke filtered LCLC stage which provides a stiff, voltage rail allowing the audio circuit to operate in a calm and orderly way regardless of the demands the music makes on the amplifying stage. Filament supplies are fully regulated to further reduce the potential for noise.

The L10 preserves the verve, colour and energy in recordings that almost all pre-amplifiers and passive volume controls otherwise lose. It achieves this without sacrificing transparency or introducing euphonic colouration to the sound.

When partnered with appropriate ancillary equipment the L10 is capable of delivering a sumptuous and enriching listening experience.

L10 SPECIFICATION

Inputs	**4 pairs (Line Level) 1 Pair (Record In)**
Input impedance	**100Kohms**
Outputs	**2 pairs Single Ended, 1 Pair (Record Out)**
Output Impedance	**230 Ohms**
Frequency Response	**7Hz - 50KHz (-3dB)**
Input Sensitivity	**640mV for 0dB output**
Signal/Noise	**>90 dB**
Power Consumption	**25W**
Dimensions	**420W x 380D x 130H mm**
Valve Complement	**6П6 (ECC99) x 1, 6U4П x 1**
Weight	**17 Kg**

Pure Sound +44 (0) 1822 612449 **info@puresound.info**

pure sound

L300 Line Stage Pre-amplifier

Following some fairly extensive research and development applied to line level amplification, ***pure sound*** is pleased to launch the L300, a new line level pre-amplifier. The L300 has 5 inputs and twin outputs (2 pairs single ended and 2 pairs balanced via XLR). The circuit uses output transformers and a sophisticated full valve rectified, choke smoothed, regulated power supply including a 300B triode as the series element.

A Line Stage pre-amplifier needs to offer the facility to select between different sources, to provide some means of attenuating the chosen source and then deliver it in an uncorrupted form to the power amplifier.

In recent times, with the prevalence of digital source components, many audio enthusiasts have adopted the use of passive volume controls incorporating resistive potential dividers and even transformer based attenuators. These are volume controls where attenuation is achieved through the use of tapped transformer windings. On the face of it either of these might appear to offer the purest approach. However, it's not so simple. Resistive attenuators are generally of quite a high impedance so as not to load the source driving them but in turn confer little drive capability themselves. In some circumstances they can sound quite transparent but it's a commonly experienced subjective impression, that such attenuators leave the music with a lack of purpose and grip. Long connecting cables may also blunt the high frequency response, a situation which may be worsened by using a following amplifier with low input impedance.

Transformer volume controls seem to address the issue of drive capability to some extent, but they have their own problems. A wide bandwidth transformer can be made such that, when using both windings in full, i.e. with no attenuation, it transfers a pretty good facsimile of the source signal. However, as attenuation is applied and the transformer has to transform more and more, difficulties start to arise. By the time significant attenuation is applied, the performance of the transformer no longer looks quite as impressive with differing patterns of resonance being visible at each step. The reproduction of timbre suffers and the sound quality realized alters slightly with each change in level. Auto-formers which attenuate by tapping off a single sided winding have actually proved to be the most transparent passive controls we have tested and yet even they seem to lack a certain something.

The other issue with volume controls based on a multi position switch is a sense that the right level for listening to a piece of music can never quite be reached. If the steps of the attenuator are made close enough to suit a source with a given output or a following amplifier with a particular sensitivity, it will be wrong with another source or another amplifier. A conventional potentiometer gives a much finer range of adjustment.

In the L300, source selection is via a high quality switch located near to the input sockets. The chosen source is routed to a high quality film potentiometer and from there on to the audio circuit. This consists of 2 directly coupled triode stages, the second loaded by an output transformer which steps down the amplified signal allowing it to be coupled to the power amplifier at a manageable level and via a low impedance output. The output stage of the L300 is impervious to long interconnecting cables or lower impedance power amplifier input stages. The use of output transformers also allows the option of a true balanced output configuration if desired.

A low gain, low output impedance stage is in itself nothing new. Many transistor pre-amplifiers are similarly specified. However, they usually achieve it by means of excessive negative feedback which is highly detrimental to the subjective reproduction of music.

The L300 also incorporates an extremely sophisticated regulated power supply to maintain constant operating conditions for the audio circuitry. It includes a valve rectifier, a choke filtered stage and then a series regulator featuring the 300B power triode as the passing tube. A very elaborate error amplifier referenced to a gas voltage reference valve allows the circuit to precisely maintain the high tension supply regardless of fluctuations in the mains supply and the varying current drawn by the audio circuit. Filament supplies are also fully regulated to further reduce the potential for noise.

The L300 preserves the verve and energy in recordings that almost all pre-amplifiers and passive volume controls otherwise lose. It does this without sacrificing transparency or introducing euphonic colouration to the sound.

When partnered with appropriate ancillary equipment the L300 is capable of delivering a truly extraordinary listening experience.

L300 SPECIFICATION

Inputs	**5 pairs (Line Level)**
Input impedance	**100Kohms**
Outputs	**2 pairs Single Ended, 2 pairs Balanced**
Frequency Response	**7Hz - 50KHz (-1dB)**
Signal/Noise	**>90 dB**
Input Sensitivity	**222 mV to full output**
Power Consumption	**150W**
Dimensions	**480 x 420 x 180 mm**
Valve Complement	**12AU7 x 6, 6922 x 1, 300B x 1, 5AR4 x 1, VR150 x 1**
Weight	**20 Kg**

Pure Sound +44 (0) 1822 612449 **info@puresound.info**

pure sound

M845 Mono Power Amplifier

The M845 mono power amplifier is a single ended design based around the 845 power triode. Operating in Class A and giving 27 Watts of output power, it will complement a wide range of medium to high efficiency loudspeakers.

The 845 triode was originally developed by RCA in 1931 as a radio transmitting and audio amplification valve. The anode is machined from solid graphite to allow high power dissipation. It has an extremely linear transfer characteristic. In recent years, a renewed interest in this kind of valve has resulted in them being manufactured again by various factories in China.

Implementing the 845 in a sympathetic circuit which takes full advantage of its capabilities is not straightforward. The filament draws a significant amount of power and also forms a part of the signal path so energising it correctly is a critical part of the design. The valve also operates with very high voltages across it so again, a careful choice of filtering components for that high voltage supply is essential such that adequate current is available to the valve at all audio frequencies instantaneously. In the M845 this supply includes a hybrid Graetz bridge for the initial rectification and a substantial smoothing choke as part of its CLC type filter.

Although all of the elements; power supply, circuit topology & component choice have a profound effect on the overall performance of a valve amplifier, one of the most important aspects is the design & construction of the output transformer. A high primary impedance, the resultant large step down ratio and the need to maintain a high level of insulation between the windings all conspire against the transformer designer and the quest for extended bandwidth with efficient power transmission. The M845 utilises an in house designed output transformer that underwent extensive trials using a variety of core materials and winding techniques before the final configuration was chosen

The other difficulty in using the 845 is in the design of a stage capable of cleanly delivering the voltage swing necessary at its grid to take it to full output. The M845 incorporates a driver stage based on the 6SN7 triode coupled via a custom wound, wideband, interstage transformer. The amplifier's input stage is directly coupled to this driver meaning that there are no coupling capacitors used in the circuit at all.

The circuit also operates without any negative feedback.

The end result is an amplifier capable of reproducing the full measure of instrument tone with extraordinary dynamic contrast, energy and colour. When partnered with appropriate loudspeakers the M845 will deliver an unparalleled reproduction of all types of music.

M845 SPECIFICATION

Input	**1 per mono amplifier. RCA Phono connector. Single Ended**
Input impedance	**1 Mohm**
Input Sensitivity	**460mV to full output**
Output Taps	**4 & 8 Ohms**
Output Power	**27W**
Signal/Noise	**>77 dB (ref full output)**
Power Consumption	**150W**
Dimensions	**260W x 470D x 240H mm**
Valve Complement	**5Z3 x 1, 6SN7 x 1, 845 x 1**
Weight	**22 Kg**

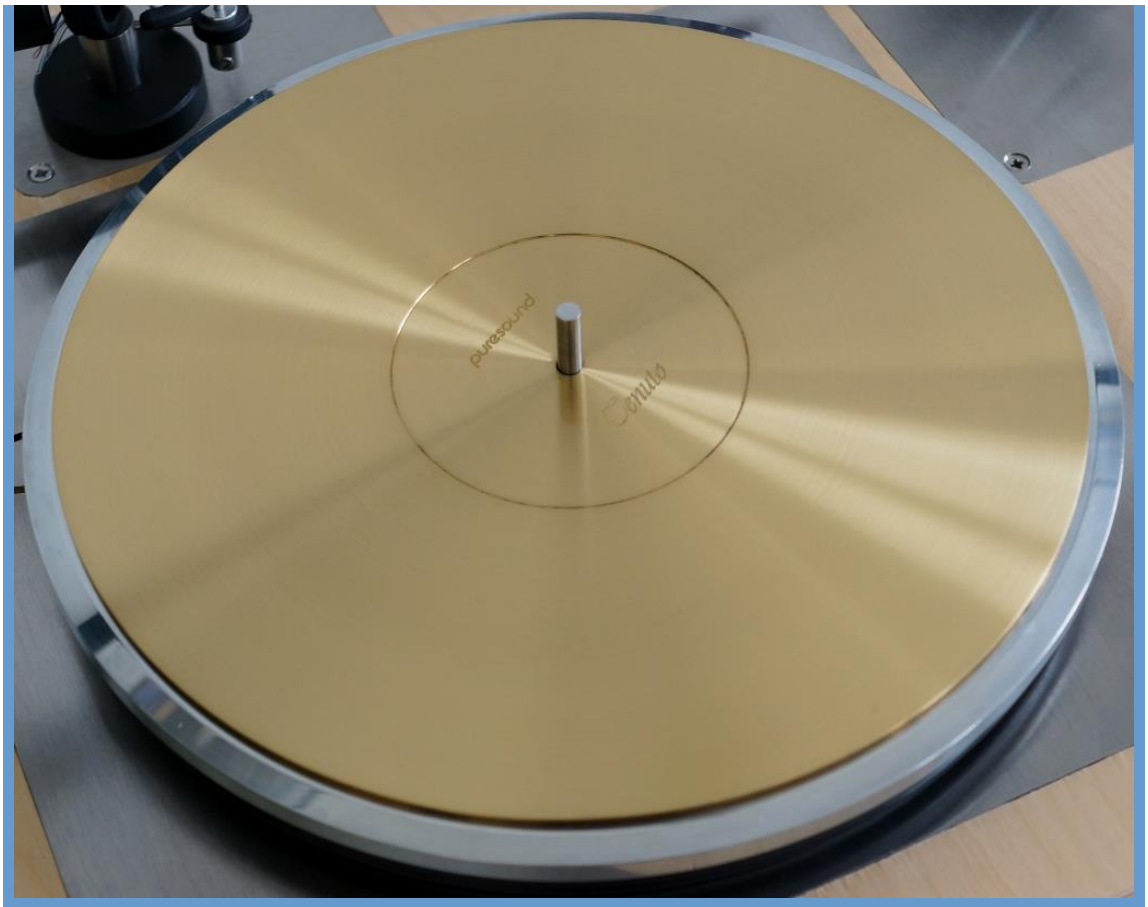
Specifications are per mono amplifier. M845 is supplied in pairs.

Pure Sound +44 (0) 1822 612449 **info@puresound.info**

***tenuto* Gunmetal Turntable Mat**

Un reemplazo para nuestro popular estera cobre ***rubato,*** el ***tenuto*** es de precisión mecanizada de bronce de cañón, una aleación de cobre, que también incluye el estaño y zinc. Un perfil de la superficie revisada significa que ahora ofrece una plataforma óptima para discos de vinilo. El borde de la rebaja etiqueta sienta 1mm más bajo que el borde exterior de la lona y el propio reembolso es menos profunda que en el tatami ***rubato.*** Ecords R se sientan mucho más perfectamente a este perfil y se puede jugar con o sin una abrazadera.

Con un peso de 1,4 Kg, el ***tenuto*** requerirá que los diseños de la placa giratoria más suspendidos subchasis se reajustan para proporcionar una plataforma de nivel. La masa adicional no aumenta la energía cinética almacenada por el plato y permitiría amortiguación muy efectiva de la resonancia no deseada que muchos platos de aleación pueden contribuir a la reproducción de sonido de vinilo. El Gunmetal también proporciona una energía permitiendo adaptación de impedancia más apropiada impartida en el vinilo por el lápiz óptico para disipar sin causar daño.


puresound
Zenith


Technics

El ***tenuto*** también hace un socio muy bien para los platos de gran alcance, de alta calidad, tornamesas de transmisión directa y ha sido en forma para adaptarse a la SP10 Mk2 perfectamente. Usuarios Lenco y Garrard también han disfrutado de buenos resultados.
Por favor llámenos para más detalles.