

# PRESS RELEASE

# Accustic Arts TUBE-PREAMP II

¥1,417,500 (¥1,350,000/税別) 2010年3月21日発売

ドイツのアックースティックアーツでは、リファレンスシリーズへの新たなるモデルとして、この度、TUBE-PREAMP Iを発売します。この TUBE-PREAMP II、既に発売しております、AMP II-MK2ならびに AMP III (日本とアメリカは、未発売)の、完璧なパートナーとなります。

今回、TUBE-PREAMP Iの目指す所は、既にTUBE-DAC Iで、トランジスター技術の利点を、真空管の原理と結合させ、実証済みのTube-Hybridのコンセプトに沿い、優れた電圧アンプに、高い電流供給能力を備えた、プリアンプを実現させる事である。

此れにより、非常に低い出力インピーダンスを達成しつつ、極度に低い倍音歪と、素晴らしい倍音歪のスペクトラムを、真空管を採用する事で、アナログサウンドとして成し得ました。

### 持徴】

・入力から出力まで、フルバランス回路で構成・Tube-Hybrid技術の利点:

- 非常に高い、インピーダンス
- 非常に広い、帯域幅
- 非常に低い歪みと より自然なスペクトル
- アナログの良さと、常に精密なサウンドパフォーマンス・お互いの影響を回避させた、四分割での増幅伝送調整を必要としない、プラグアンドプレイのチューブ交換・スタジオ技術に培われた、プロ用 C bss A出力段・最高クラスの C 'Burr B rowm OPA627」を採用、さらに金メッキ接点のリレーを配置

・軍用規格の最上級バルブ「12AX7WA」を、4回の選別を経て採用

- ・インプットセレクターは、金メッキが施され、銀接点を持つ、最高品質のドイツ製
- ・S系統のバランス入力:3 x XLR + 2 x RCA
- ・ 係統のサラウンド・バイパス入力:1xRCA
- ・2系統のバランス出力:2xXLR (Bi-Amp駆動)
- ・ 係統のアンバランス出力: 1 x RCA (Subwoofer)
- ・治の電磁シールド・トロイダル・トランスフォーマー (Made in Germanyを装備
- ・フロント・パネルおよびカバーは大きく厚いアルミニウムによる筐体構造
- ·Handmade in Germany

#### [スペック]

入力:3xフルバランス・ハイレベル (XLR) 2xアンバランス・ハイレベル (RCA)

1 xアンバランス(RCA) "SURROUND BYPASS"

出力:2xフルバランス(XLR) 1xアンバランス(RCA)

最大利得:40倍/+12 dB

L & Rch信号差: 0.2 dB (from 0 dB to -40 dB)

入力抵抗:バランス2×50k アンバランス50k 出力抵抗:バランス 2 x 34 アンバランス 34

内部歪 **10.0065** %with 4.0 Veff on 10 k (60 Hz / 7 kHz 4.1)

高調波歪 (THD+N) 10.0022 %with 10 Veff on 10 k (22 Hz - 30 kHz)

S/Ntt:90 dB (ref.500 mV/potentiameter turned to left)

真空管: 12AX7WA / ECC83 / 7025 寸法 (H xW x D):100 x 482 x 375 mm

重量:12 kg





# The newest member of our reference series:

# **ACCUSTIC ARTS® TUBE-PREAMP II**

**World premiere!** At the end of November 2009 the time had come. The **ACCUSTIC ARTS® TUBE PREAMP II** celebrated its world premiere. The TUBE PREAMP II is a further addition to our ACCUSTIC ARTS® Reference Series and perfectly complements the existing products of this series which have enjoyed worldwide success and received a number of awards. The TUBE PREAMP II is the perfect playing partner for the reference power amplifiers AMP II – MK 2 or AMP III.

# **Clever: the circuitry**

The ACCUSTIC ARTS® **TUBE PREAMP II** is a preamplifier with an exceptional and uncompromising design along the lines of the so-called **tube-hybrid concept**. This concept, also an integral part of our TUBE DAC II, combines the advantages of transistor technology with the advantages of the tube principle. Tubes are excellent voltage amplifiers, but can only supply a limited amount of current. As a result, in the TUBE PREAMP II we place the tubes exactly there where these clear advantages can influence the acoustic pattern, i.e. for the voltage amplification. In places where current has to be supplied, e.g. for impedance conversion, we use the proven premium IC OPA627® from Burr Brown / Texas Instruments. This combination allows us to achieve very low-resistance outputs which are also characterised by a high current capability. We use solid state technology and tubes to take advantage of their physical characteristics to realise an exceptional, analogue sound experience with an extremely low harmonic distortion and excellent harmonic distortion spectrum which sets standards.

As opposed to most tube preamplifiers, the TUBE PREAMP II is in fact **fully balanced**, i.e. with 4 completely separate amplification stages from the signal input to the signal output. This proven principle of fully balanced signal processing was taken over from our PREAMP I – MK 3 preamplifier which has been successful for a number of years and further developed to meet new requirements.

The 4 amplification stages are divided into one inverting and one non-inverting signal path per channel. Each of these amplification stages contains a high precision tube manufactured according to military specifications. This principle enables perfect channel separation.

The loudness is adjusted via a high-end selective, high precision 4 channel potentiometer. It is natural that the TUBE PREAMP II functions completely according to the proven Class A principle.

## **Elaborate: the power supply**

An ideal power supply is a precondition for a high-end preamplifier. The requirements for the power supply with a tube-hybrid preamplifier are much higher than for a purely transistor-based device. This is because the tubes require different low voltages and also a high voltage of approx. 300 V for the anodes. This high voltage has to be precisely controlled and absolutely free of interference so that the music signal can be perfectly amplified in the tubes. For this reason the TUBE-PREAMP II is equipped with a number of separately functioning power supply units and 2 separate high-end transformers, with one transformer exclusively reserved for the voltage required for the tubes. Both the toroidal core transformers used in the TUBE-PREAMP II are of an exceptionally high quality and have the best possible core material from Switzerland in order to prevent any negative interference inside the unit. In order to ensure that the power supply units work perfectly, the filter capacity for all voltage circuits was selected generously (e.g. 20,000  $\mu F$  alone for the voltage supply to the semiconductors).

#### Perfect: the tubes

There is no dispute that the quality of the tubes is decisive for the quality of a unit based on tube technology. Tubes are sensitive components and thus have to be carefully selected and tested. We **manually select the tubes** and **make pairs** according to strict testing and measuring criteria to ensure that only perfect tubes are used in the TUBE PREAMP II. Before the tubes are fitted to a TUBE PREAMP II, they have already passed a two-stage inspection process: one inspection carried out by our supplier and a second inspection made by our own specialists.

Before and after the **first continuous test of 100 hours**, all functions and parameters of the whole unit are inspected and recorded in a protocol. The values are compared and if the deviations are within a defined low tolerance range the unit is subjected to a further **second continuous test** of 100 hours. After this test further measurements are made and here the parameters must fit perfectly with the output values. In total, a TUBE PREAMP II is measured and tested three times and the tubes are even tested four times. The TUBE PREAMP II only leaves the premises of ACCUSTIC ARTS<sup>®</sup> after the requirements have been 100% met. This high level of scrutiny guarantees an extremely low failure rate of the tubes and ensures many years of uninterrupted musical pleasure.

The type of tube used is a so-called **dual triode tube type E83CC** in the special version 7025 and belongs to the tube group 12AX7. The tubes meet the high requirements of the military and come from the current production of a European manufacturer. The sound can be described as: **pleasantly warm with a very balanced sound pattern**, a sophisticated bass range, clear high frequencies, good dynamics and low harmonic distortion.

We prefer tubes from the current production and do not use NOS tubes, as these are not available in sufficient quantity and not available in consistent quality.

### Quality: the rest of the components

The TUBE PREAMP II guarantees absolute perfection through the exclusive use of **selected components with low tolerances and highest quality grade**. A number of the individual components are re-measured by hand and sorted into matching pairs.

The housing is also uncompromising: **solid**, **carefully crafted aluminium plates combined with chrome-plated rotary parts in brass** allow for a high quality look and surface feel and excellent stability. Stability is important to ensure that the tubes can work undisturbed and are not compromised by any vibration present in the housing.

## Simple: operation

As with all ACCUSTIC ARTS<sup>®</sup> products, the TUBE PREAMP II is also **easy to operate**. This is a welcome change for many music lovers today when most electronic devices are overloaded with partly unnecessary functions.

The basic functions of the TUBE PREAMP II are operated by two chrome-plated rotary controls. Both controls are more or less built to last for ever. The rotary controls, for example, are metal and incredibly solid (Made in Germany) and are equipped with gold-plated silver contacts, which are corrosion-resistant and also enable many thousands of switching cycles.

#### Phenomenal: the sound experience

The result of top quality individual components, detailed development work, innumerable sound tests, careful production and involved measurement tests is a sound experience of the highest perfection.

In combination with the other reference series products of ACCUSTIC ARTS<sup>®</sup>, music is transformed into an **incomparable sound experience "Handmade in Germany".** 



Input slection by relays with gold-plated contacts

Power supply for tube heating and function control as well as high-voltage generation for tube stage



Balancing stage for unbalanced inputs with high precision ICs (TI OPA2107)

Fully balanced transistor stage; powered by 4 x OPA 627

HF input filter section with selected precision capacitors

Power supply for transistor section with more than 20,000 µF capacity for extremly clean voltage

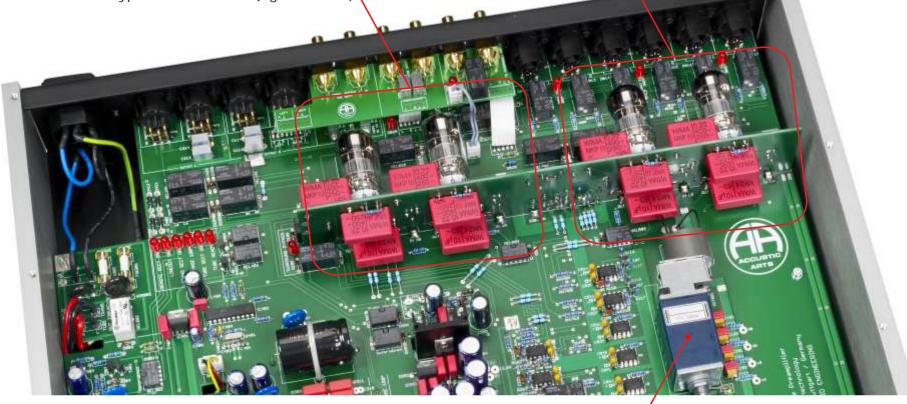
magnetically shielded 75 VA toroidal core transformer for supply of tube section

magnetically shielded 75 VA toroidal core transformer for supply of transistor section



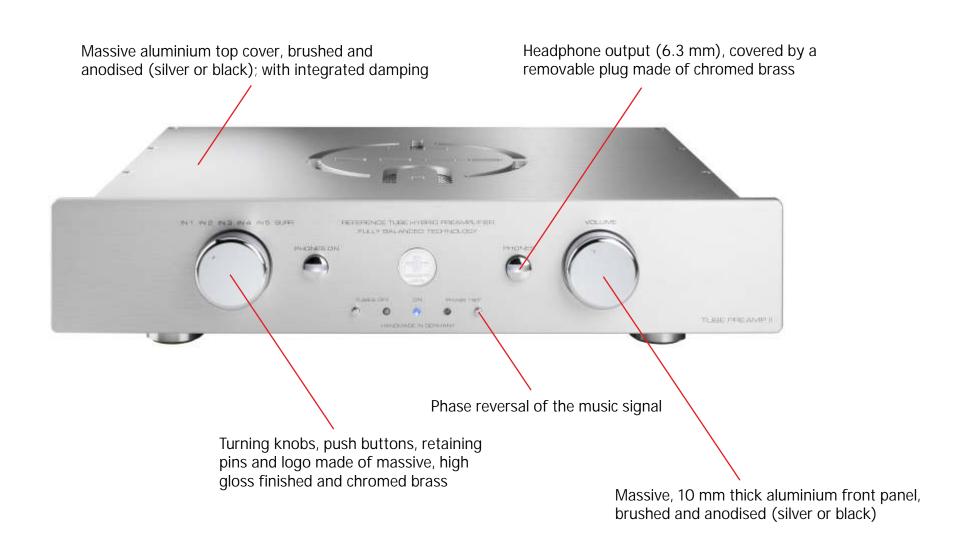
Fully balanced tube amplification stage with selected dual triodes; type E83CC / 12AX7 (right channel)

Fully balanced tube amplification stage with selected dual triodes; type E83CC / 12AX7 (left channel)

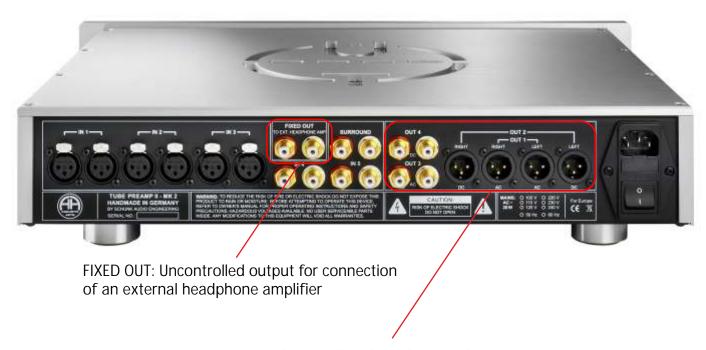


selected 4-ch potentiometer









2 balanced and 2 unbalanced outputs for connection to a power amp; free choice between AC coupled or DC coupled outputs