

ESOTERIC



“Master Sound Works”  
A-100 Introduction

June 2008

TEAC ESOTERIC Company

ESOTERIC



# 2008

Finally.....you can hear the true sound of the original master tapes!



# ESOTERIC

Amplifier Series



Model A-100

# ESOTERIC

Amplifier Series

## Design Philosophy



ESOTERIC

## MSW Amplifier Series

### *Master Sound Works*

*Master Sound Works ("MSW") is the result of over twenty one years' accumulation of high-end audiophile technologies.*



*MSW represents a further revolution in reference quality sound, as developed and implemented by ESOTERIC innovation and engineering.*

# ESOTERIC

## MSW Amplifier Series

### *Master Sound Works*



*...Original master tapes faithfully record each and every piece of information within a work of music.*

*By faithfully extracting and reproducing such a large amount of information, ESOTERIC generates a feeling of realism that you have never experienced before. Through these actions, ESOTERIC “advances the state of the art.”*

# ESOTERIC

## MSW Amplifier Series

*Master Sound Works*



*...Confidence in this belief is what motivated ESOTERIC - a long-time developer of magnetic tape recording - to invest a vast amount of R&D, time and effort, all of which culminated in MSW amplifiers.*

# ESOTERIC

## MSW Amplifier Series

### *Master Sound Works*



*The MSW amplifier line is a series of products that perfectly reproduces the power and beauty contained within traditional digital masters and original master tapes.*



# MSW

Master Sound Works



Vacuum Tube  
Stereo Power Amplifier

**A-100**

Master Sound Works

ESOTERIC



ESOTERIC



XLR (BALANCED)  
 2. HOT (+) 1. COMMON  
 3. COLD (-)

BIAS  
 A L B

INPUTS

CAUTION  
 RISK OF ELECTRIC SHOCK  
 DO NOT OPEN  
 AVIS  
 RISQUE DE CHOC ELECTRIQUE  
 NE PAS OUVRI

SPEAKERS

ESOTERIC A-100  
 STEREO TUBE POWER AMPLIFIER  
 SERIAL NO.  
 SELEPAS  
 100V~ 50-60Hz 200W  
 TRAC ESOTERIC COMPANY MADE IN JAPAN

SIGNAL GND FUSE ~ IN

CLASS 2 WIRING

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003. CET APPAREIL NUMERIQUE DE LA CLASSE B EST CONFORME A LA NORME NMB-003 DU CANADA.

LICENSED BY AVERO



# ESOTERIC

Vacuum Tube  
Stereo Power Amplifier **A-100**

Evolving the technology.  
The essence of modern tube amplification

- **KT-88 UL Push-Pull**  
1<sup>st</sup> stage: 12AT7 (x2) Drive stage: 12AU7 (x4)  
Last stage: KT-88 (x4)
- **DC voltage control circuit**  
for directly-coupled triple stages
- **Unique bias technology**
- **Custom output transformer**  
(Silver coating foil for 2<sup>nd</sup> order coil)



# ESOTERIC

Vacuum Tube  
Stereo Power Amplifier **A-100**

Evolving the technology.  
The essence of modern tube amplification

- Stabilized power supply for amplification stage
- DC powered tube heater
- Mechanical chassis construction
- Two selectable bias modes (A/B)



# ESOTERIC

Vacuum Tube  
Stereo Power Amplifier **A-100**

Evolving the technology.  
The essence of modern tube amplification

- Ultra high grade parts selection
- Input selector / volume attenuator  
(Selectable integrated mode operation)
- Wireless remote controller



# ESOTERIC

## KT-88 UL Push-Pull

KT-88s are well known for their powerful sound. The A-100 delivers highly sophisticated musical expression from it's advanced circuit design - the perfect blend of 'power' and 'high sensitivity'.

KT-88s used by Esoteric are made in Slovakia where quality is strictly controlled in pairs. The KT-88s are then burned in for at least one month, before final assembly into the A-100.



ESOTERIC

Vacuum Tube  
Stereo Power Amplifier **A-100**

## Directly-coupled triple stages

The DC voltage control circuit ensures stable operation of the directly-coupled triple stages (voltage amplification stage, cathode follower stage and output power stage), achieving a truly involving acoustic expression.

## Unique active bias circuit

The A-100 features a unique and advanced bias circuit. This circuit compensates the bias voltage supplied to the output stage, detecting the cathode current and the driving level, providing very high linearity and superior performance!

ESOTERIC

Vacuum Tube  
Stereo Power Amplifier **A-100**

## Stabilized power supplies

All stages except the KT-88 stage are powered by fully stabilized power supplies. The A-100 reproduces an exceptionally deep and finely detailed soundstage using this innovative power supply design.

## DC powered tube heater

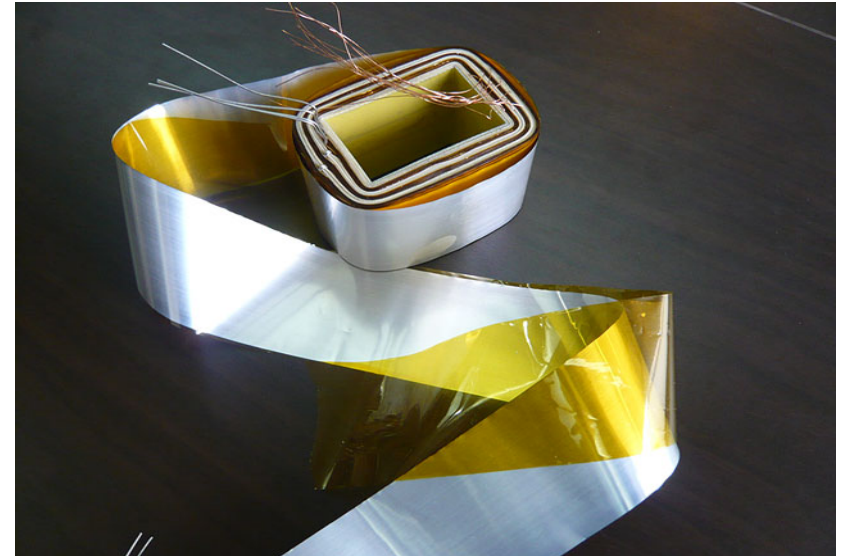
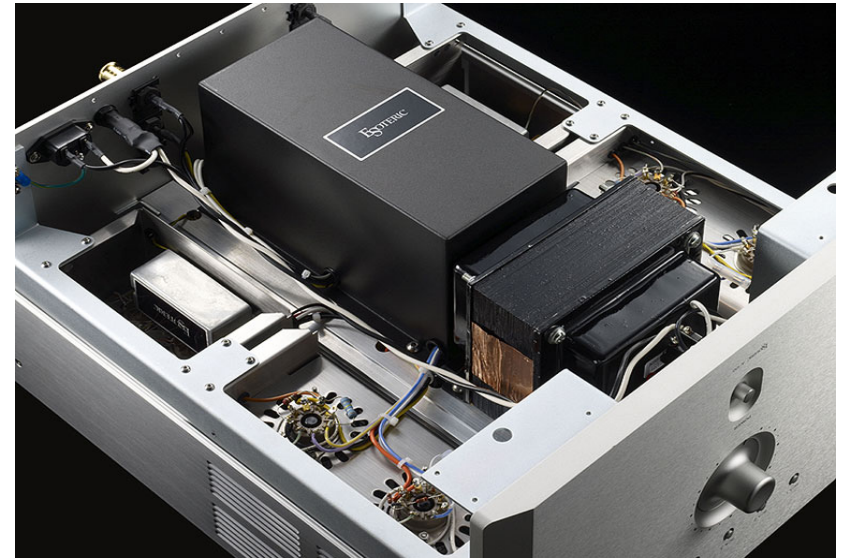
All tubes except the KT-88 are DC heated. This design greatly contributes to the low noise design of the A-100 (S/N ratio: greater than 98 db).

# ESOTERIC

## Custom output transformer

(Silver plated copper foil as the 2<sup>nd</sup> order coil)

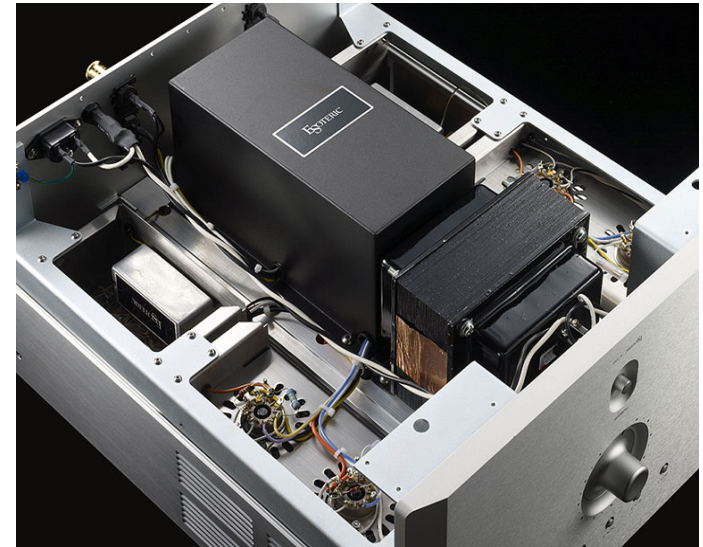
Esoteric's custom output transformer uses specially treated silver plated copper foil as the 2<sup>nd</sup> order coil. This design provides ultra firm coupling properties between the 1<sup>st</sup> order coil, achieving highly delicate and precise musicality.



# ESOTERIC

## Mechanical chassis construction

Power supply and output transformers are held by an extremely rigid “H” structure and circuit components reside in a block configuration surrounding this mainframe design. Implementing this massive chassis construction helps to isolate the unit from vibration and induced noise between circuit components.



# ESOTERIC

## Two bias modes

Two bias modes (A or B), selectable from a back panel switch. A mode might be selected for classical music but these decisions are totally subjective to the user.

**A mode:** Slightly reduced bias current.  
Slightly finer sound, enhanced detail.

**B mode:** Reference setting.



# ESOTERIC

Ultra high grade parts selection

Signal loss is kept to a minimum with the use of high grade audiophile parts.

RCA input terminal: WBT-0201

Speaker terminal: WBT-0710Cu nextgen

AC power inlet: Rhodium plated with low temperature treatment



# ESOTERIC

## Input selector / Volume attenuator

The A-100 is designed for pure power amplification but it also works as an integrated amplifier by selection from an operating switch on the rear panel. This switch activates an input selector (RCA x3 / XLR x1), and includes a volume attenuator plus system remote control.

LINE IN: Integrated amplifier mode  
DIRECT IN: Power amplifier mode



# ESOTERIC

## Remote controller

A remote control with illumination keys for integrated amplifier mode is included

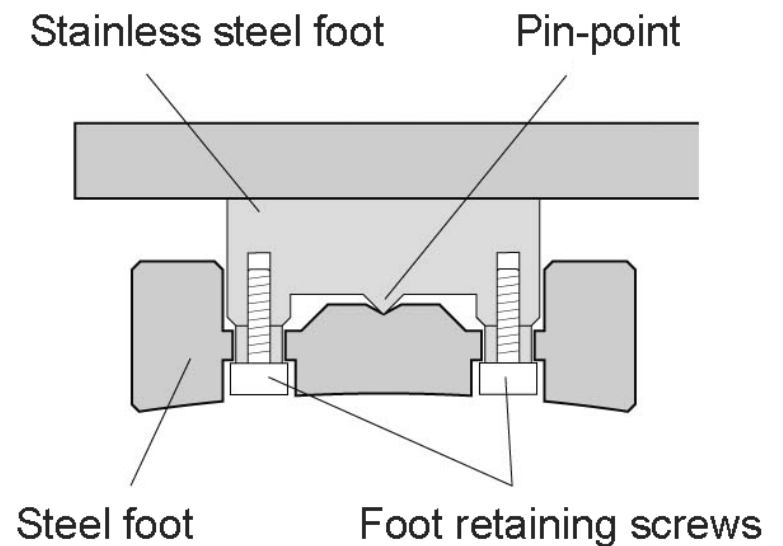


# ESOTERIC

## Vacuum Tube Stereo Power Amplifier **A-100**

### Three pinpoint isolation feet

Three pinpoint isolation feet made of quenched steel (patent pending), enables stable placement of the extra-heavy chassis and enhances the rigid, vibration-free construction of the A-100.





Top view

“H”  
mainframe

12AT7

12AU7

Advanced  
bias circuit

KT-88

Bottom view

WBT-0710Cu

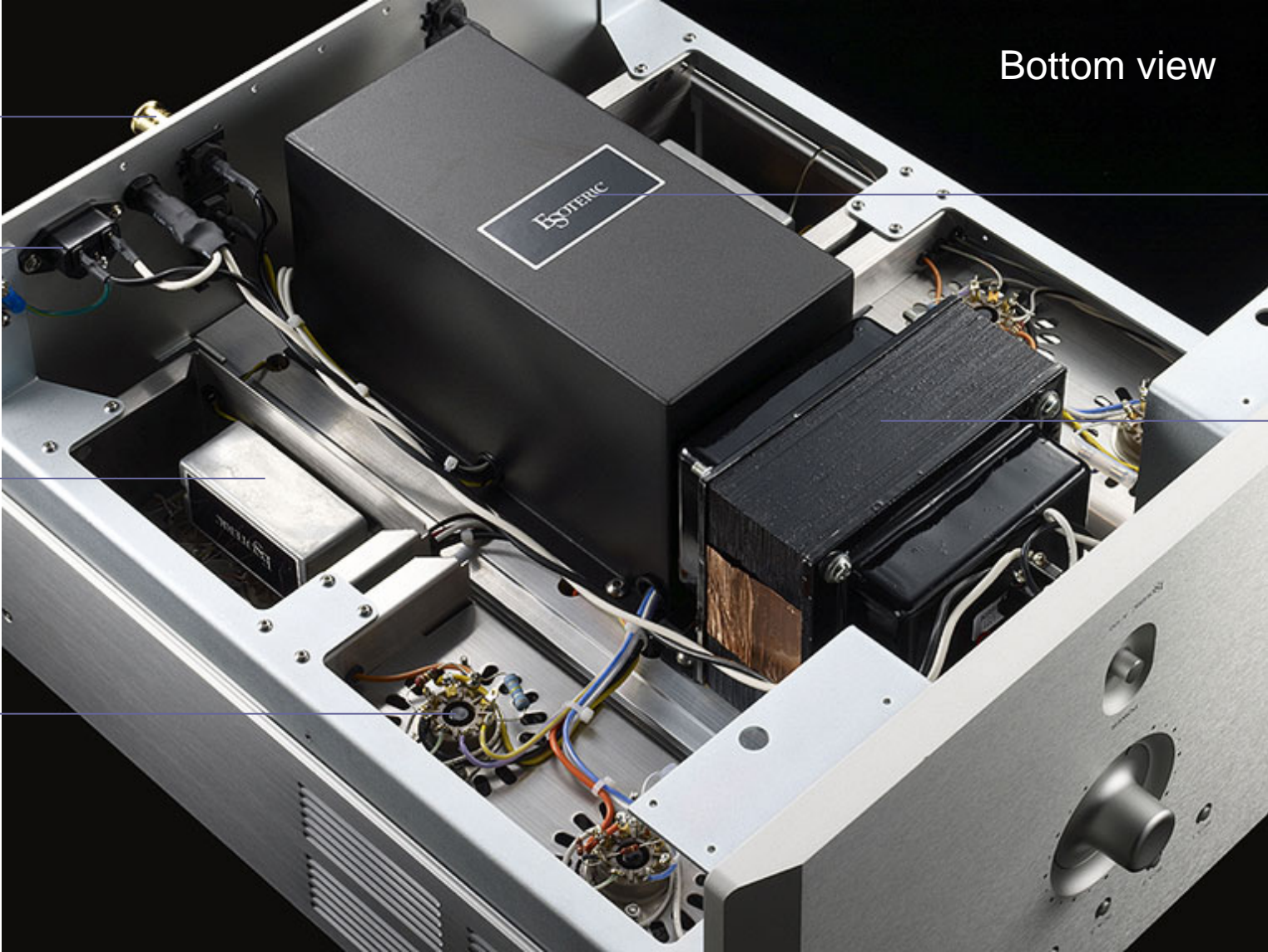
Rhodium plated AC Power inlet

Zero voltage control circuit

Hand wired tube socket

Output transformer (L x1 / R x1)

AC Power Transformer



# ESOTERIC

**Finally you can hear the true sound  
of the original master tapes**

**It is the moment you've been waiting for.  
You can see the sound, feel the sound,  
and experience the sound.  
That's the quality of Master Sound Works  
amplification from ESOTERIC**



**Vacuum Tube  
Stereo Power Amplifier**

# A-100

# ESOTERIC



## Main Specifications

Output power	Minimum 45W+45W (1kHz, 4 Ohms / 8 Ohms)
Frequency response	20 Hz to 60 kHz (at 1W, 8Ohms, +1dB/-3dB)
S/N ratio	more than 98dB (JEITA)
Input sensitivity	400 mVrms / 45 W (8 Ohms)
Input impedance	10 K Ohms (Line in), 1M Ohms (Direct in)
Input terminals	RCA x3, XLR x1
Output terminals	WBT-0710Cu pole terminals x 1 pair (4 Ohms / 8 Ohms)
Vacuum Tubes	First stage: 12AT7 x2
	Drive stage: 12AU7 x4
	Bottom stage: KT88 x4
THD	Less than 1% (10W, 1kHz, 8 Ohms)
Power supply	AC 230 V, 50 Hz (European model) AC 120 V, 60 Hz (U.S.A. / Canada model)
Power consumption	200W
External dimensions (W × H × D mm)	382mm × 252mm × 486mm (15 1/16" × 9 7/8" × 19 1/16")
Weight	40 kg (88 lbs.)

# 2008

Finally.....the true sound of the original master tapes!



Master Sound Works

ESOTERIC

# ESOTERIC

MSW Amplifier Series

