



**"300B S.E. SILVER NIGHT"  
OWNERS MANUAL**

## INTRODUCTION

Congratulations on purchasing the highly appraised "SILVER NIGHT" amplifier from "AUDION". Before we discuss circuit topology and design we would like to introduce you to our company.

Audion was originally conceived by D.G.Chessell following his love of music, and a long time hobbyist always delving into the depths of various components and amplifiers. The concept in those early days was to allow people to get an insight into audiophile high end without sacrificing their home or bank balance. This overall picture still holds good for most of the current production, with just a few bespoke built and designed products entering the upper echelons.

In 1986, David was given the position of Technical Director for "Audio Innovations" at a time when the company had an enviable reputation for sound quality. During this period and the next few preceding years a friendship flourished between David, and the initiator of "Audio innovations", Mr. Erik Andersson, one of Europe's top audio designers. Erik had recently returned to live in his homeland of Sweden and was in the process of launching the "EDISON Original" as a market leader in Scandinavia.

Audion was established in 1987 and caught the imagination of reviewers for their top-flight performance and high build quality.

Following on from this, subsequent years saw Audion's pre-amplifiers continue to improve evolving into a two box state of the art design, with multiple on board regulation quality hand built to military specifications. Our Quattro preamp was also launched and set a standard becoming the ultimate in high-end audio pre-amplification.

Erik in these years flooded the Scandinavian market with affordable Edison Kit's, and a range of top-flight yet affordable triode amplifiers under the banner of "Andersson".

In 1992 after a few depressed trading years in Europe and the saturation of the Scandinavian market, a re-launched copy of the "Western Electric" 300B by Golden Dragon enabled two friends to join together with a base in the UK. To enable a superior amplifier to be designed and distributed around the world the first joint product saw the "Silver Night 300B" mono-blocks, with a front-page debut at the beginning of 1993 in the British press.

The Silver Night's provided, and still provides, affordable high-end true triode amplifiers with no-feedback to be available to a large number of fortunate audiophiles wanting outstanding sonic virtues.

## THE AUDION 300B

After many years of development and an enviable reputation for designing industry benchmarks, we have released for your benefit a model, which exceeds those currently available within the "affordable bracket". The Silver Night Stereo follows the tradition of Audion to continue providing listening pleasure far beyond the price premium paid, and a sonic signature unbeatable by anything currently available on the commercial market.

To continue this extraordinary feat we are fortunate to have one of Europe's most highly acclaimed commercial valve audio designers, Mr. Erik Andersson, with his in-depth knowledge of circuit topology. Erik has to his name, amongst others, the sonic classic "Edison Original", and he was the originator of the UK built Pure Triode<sup>(1)</sup> amplifier trend that he originally started with the "First Audio" and "Second Audio" amplifiers under Audio Innovations.

We have produced an amplifier to exceed these models that has very high specifications, and an outstanding sonic signature, by using advanced *multi stage linear* technology. An in-house designed broadband frequency transformer enables a dynamic character of true to life proportions throughout the full spectrum of audio frequencies and extended harmonics running in "Super Linear Mode"<sup>(2)</sup>

The "AUDION 300B SE" with its well-developed circuit topology has been coupled with selected components, and high grade wiring using a quality glass fiber substrate. All this ensures component integrity, and has built in usability incorporating direct CD connection and single shelf stereo operation, all coming together to produce an amplifier of unsurpassed quality.

### "AUDION AMPLIFIERS" "AFFORDABLE ESOTERIC HIGH END"

<sup>(1)</sup> Pure triode denotes the use of a pure triode not a pseudo triode coupled pentode.

<sup>(2)</sup> Super linear denotes the use of a pure triode device in pure Class-A without feedback.

## **THE 300B DIRECT HEATED TRIODE**

The 300B direct-heated triode was originally designed in 1929 by the Western Electric Corporation of America. The outline parameters for the new device were to produce an amplifier that could not be improved upon. The final device proved so successful with respect to linearity that even up until this day the 300B has yet to be beaten within its power class, and its measurements of linearity are even now a source of comparison for which modern day devices cannot hope to aspire to. As such, the device inherently has a low internal impedance and high degree of self-damping that amplifiers can be built without feed-back.

A correctly designed amplifier using the 300B can attain a remarkable level of sound quality and technical specification, avoiding the widely discussed evils of feedback.

The original Western Electric 300B is still available in small numbers on the surplus market, but the release of the Chinese versions of this tube have enabled production of amplifiers commercially to become a reality. In recent *extensive tests* throughout the world the new 300B has proven superior to the original Western Electric in all aspects thus retaining the original criteria as outlined in 1929.

### **THE 300B TRIODE**

***"An amplifying device more linear than any other  
amplifying device within its power class"***

Amplifiers incorporating the above tubes running in "SUPER LINEAR" and "SELF CANCELLING SINGLE ENDED" Class-A are available from Europe's leading triode amplifier designers.

## **300B SE SPECIFICATION**

### **SINGLE-ENDED SERIES**

POWER OUTPUT RMS:	2 x 7 Watts into 8-OHMS Class-A at 240V AC
LINE SENSITIVITY (FULL OUTPUT):	Variable >150mV RMS Full output
DISTORTION:	<0.5% @ 1KHz AT 3/4 Max power
FREQUENCY RESPONSE:	20 Hz - 24 KHz (+/- 3dB)
LINE POWER NOMINAL:	145W @ 240V AC

### **Push /Pull SERIES**

Each Mono-block	
POWER OUTPUT RMS:	24 Watts into 8-OHMS Class-A at 240V AC
LINE SENSITIVITY (FULL OUTPUT):	Variable >150mV RMS Full output
DISTORTION:	<0.1% No Feedback
FREQUENCY RESPONSE:	11 – 30KHz ( $\pm 3$ db)
LINE POWER NOMINAL:	140W @ 240V AC Per Mono-block

#### **OPTIONAL VARIABLE INPUT SENSITIVITY SUITABLE FOR LOADS 40hm's to 16-Ohm's inclusive**

The Audion 300B single-ended amplifiers employ pure Class-A circuitry from the input to the output, with two voltage gain stages culminating in a high dynamic driver circuit driving a Super Linear<sup>(1)</sup> output stage that operates with auto-bias

Throughout the amplifier, no overall feedback is incorporated which would reduce dynamic headroom. All driver and output stages are running in optimized Class-A utilising advanced phase cancellation circuitry

The 300B valves utilized in the amplifiers are operating within manufacturers guidelines, and as such should provide a minimum of 2000 hours tube life, approximately 2 years in general private use.

1. Please note the input valve is of the type E88CC/6922, and should always be placed in the socket adjacent to the input sensitivity control knob. The other tube, or driver tube is a high specification 5687 double triode.
2. Warning: Please note that the valves in the amplifier(s) in operation produce heat equivalent to a 40w light bulb, and should not be touched at any cost.
3. An initial burning in period of 2 weeks is necessary for optimum performance, and in general use a warm up period of 10 to 15 minutes improves the overall sound.

<sup>(1)</sup> Super Linear denotes a pure triode operating in pure Class-A

# **IMPORTANT**

## **VALVE PLACEMENT**

The input valve (E88CC/6922) sits on the left  
The 300B valve has a black dot on its white base which is positioned at South West (between 6 & 9 O'clock. Note: inserting the 300B the wrong way around will at least damage the valve base pins and may result in a loose valve causing crackling.

## **SERVICING REQUIREMENTS**

**(QUALIFIED SERVICE ENGINEERS ONLY)**

1. All tubes should be selected for low microphony and low noise.
2. No other voltage adjustments will be necessary but the valves should be replaced as matched pairs.
3. In the unlikely event of system fuse failure the fuse should be replaced with a 20mm type not exceeding 2A for 240V mains, or 3.15A for 110 to 120V mains.
4. Any modification to the circuit will invalidate the warranty.

**THE PRODUCT IS WARRANTED FOR 2 YEARS PARTS AND LABOUR (UK ONLY) AND THE TUBES ARE GUARANTEED FOR 3 MONTHS . ( THIS DOES NOT AFFECT YOUR STATUTORY RIGHTS ) .**