



**"300B GOLDEN NIGHT"
OWNERS MANUAL
THE WORLDS FIRST
"SELF CANCELLING SINGLE ENDED"**

INTRODUCTION

Congratulations on purchasing the highly appraised "GOLDEN 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 "Golden Night 300B" mono-blocks, with a front-page debut at the beginning of 1993 in the British press.

The Golden 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 that exceeds those currently available. This follows the tradition of Audion to provide a listening pleasure unbeatable by anything else currently available in its price bracket. A totally new concept never used before has been investigated, the results of which have proved extraordinarily - the arrival of single-ended clarity with push pull drive.

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⁽¹⁾ 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 "Self Canceling Single Ended Mode"

The "AUDION 300B" 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"

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

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"***

300B SE SPECIFICATION

SINGLE-ENDED SERIES

POWER OUTPUT RMS:	10 WATTS into 8-OHMS Class-A at 240V AC
LINE SENSITIVITY (FULL OUTPUT):	<200 mV RMS
DISTORTION:	<0.5% @ 1KHz AT 3/4 Max power
FREQUENCY RESPONSE:	15 Hz - 40 KHz (+/- 3dB)
LINE POWER NOMINAL:	105W @ 240V AC

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 Self Canceling Single Ended 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 CVX100, and should always be placed in the socket to the **RIGHT** when viewed from the front of the amplifier. The driver tube is a high specification CVX120.
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.