This historical Joule-Electra Product info is provided courtesy of Signature Sound High-End Audio (Rich Brkich). We provide service, support, and (some) upgrades for Joule-Electra gear. Joule-Electra may no longer be in business, but we still love it! Signature Sound, Liverpool, NY USA Website: www.sigsound.com Tel: 315-622-4137 E-mail: hifi@sigsound.com



## LA-150



Joule-Electra is proud to introduce our newest line stage pre-amplifier, the LA-150. Based on the widely acclaimed LA-100 and the result of many significant developments, the LA-150 is yet another astounding step forward in performance. The new LA-150 retains all of the virtues of the LA-100, but prodigiously increases the sonic and musical performance throughout the audio spectrum. There is not a single area of performance that is not improved in the 150. The LA-150 uses the Joule-Electra Mu follower circuitry – the perfect environment for triode performance – along with two extraordinary new tubes to achieve a new benchmark in performance. Another Russian military wonder tube has found its way into the hi-fi realm: the 6C45-P. A major feature of this tube is the single triode in a glass envelope. Most high gain tubes found in audio have two triodes per glass envelope. The 6C45-P has the gain and power potential of fifteen12AX7's operated in parallel (30 triodes paralleled). The incredible gain and power is attained from a simple design, robust construction, and interfaced with the splendid new 6H30-P employed as a Mu follower.

The Joule configuration uses these two new tubes in such a way that the overall circuit becomes even simpler. The 6H30-P, as Mu follower, provides the perfect environment for the 6C45-P gain tube. This allows the primary output from the preamp to be taken from the plate of the gain stage. There is only one single vacuum (triode) in the signal path! This is the simplest and most elegant circuit possible for a tube amplifier. One 6C45-P and 6H30-P are in each channel of this fully dual-monaural design. The magic pairing of these two Russian tubes and the Mu follower circuit is given full realization by an all new power supply. The new LA-150 offers greatly improved dynamics throughout the audio spectrum, considerably improved bass drive and a clean and open presentation. Music emerges freely and effortlessly with all the tonal beauty that only comes in a Joule.

The single triode output stage of the LA-150 has an output impedance of less than 400 ohms, which is low enough to drive all but the most demanding amplifiers, i.e., low input impedance and low voltage sensitivity power amps. IF a lower output impedance is required, the output can be taken from the Mu follower section which has an output impedance of only 50 ohms letting it interface with many solid state power amplifiers. Please contact us if you have questions regarding Joule component compatibility with other products.

As with all Joule-Electra components, the LA-150 is hand built with optimized parts, unique construction techniques, and a full commitment to craft. All Joule-Electra preamps feature precision engineered power supplies with tube regulation. For those with phono requirements, the new preamp is available as the LAP-150 featuring the latest Joule phono stage and an outboard power supply. The esteemed LA-100 will retain its proud place in our product line as our entry level preamplifier that is unmatched in performance at anywhere near its price. Mark III LA-100's and LAP-100's can be upgraded to a whole new and exciting level of performance. The modifications are extensive, but the charge is nominal. Please contact us for precise information, prices, and scheduling for these upgrades.

JOULE

## **STARGATE**

The Joule-Electra Stargates are transformer coupled parallel single-ended triode monobloc amplifiers delivering 30 full Class A watts of pure music into 4, 8, and 16 ohm loads. The amps are also available in 40 wpc push-pull configuration. More importantly the Stargates are truly innovative medium power tube amplifiers capable of astonishing musical performance. Combining many of the exceptional characteristics of our acclaimed Joule-Electra OTL's (Output-Transformer-Less) along with the inner glow and mid-range magic of a good Single-Ended Triode amplifier (SET), the Stargates establish a new gauge of performance and value.

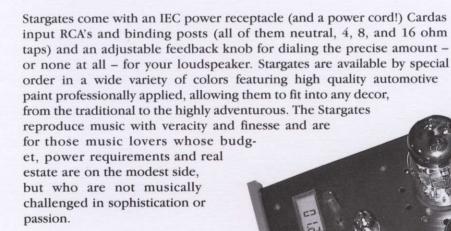
The Stargate uses the renowned Mu follower driver circuit used in the Joule OTL's and features the same awesome 6C33 Russian triode in the power position; but instead of adding power tubes in parallel, like the OTL's, to achieve the correct output impedance, a specifically designed transformer is used for coupling the amp to the loudspeaker. The low plate resistance of the 6C33 power tube allows a very low primary impedance and a low turns ratio to be implemented in the transformer. The resulting transformer is a tightly coupled primary to secondary design that uses very large copper wire capable of carrying large amounts of current. The Stargates weigh 45 lbs. and their construction is rock solid. The amplifier design is simple, elegant and robust endowing the Stargate with a performance envelope other medium power tube amplifiers can only envy.

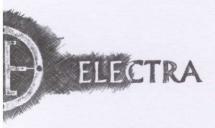
The innovation of building the Stargate in a parallel single-ended configuration results in an amplifier that accesses a big chunk of the OTL magic. Possessing a large measure of the OTL's speed, transparency and articulate directness along with the beguiling mid-range and harmonic expression that is SET-like, the Stargate is a realization of disparate tendencies into a coherent sonic reality. The high frequency reproduction is airy, open, and grainless with nary a ragged edge anywhere to be found. The Stargates are not euphonic or colored. The music comes through directly and honestly. This quality promotes involvement in the communicative power of music. In SET terms the Stargates are extremely powerful, allowing them to interact successfully with a wide variety of loudspeakers. The Stargate's effortless full class A power delivery makes it sound like a bigger amplifier than it is. It brings honest dimension and life to music when coupled to an appropriate loudspeaker.

The Stargate is currently under review by Stereophile magazine.

They produce 30 honest, beautiful watts of music making power, which means they perform best with speakers of somewhat higher sensitivity, benign impedance curves and reasonably simple

crossovers. Fortunately many good sounding loudspeakers meet these criteria and are candidates for a rewarding musical marriage.







VZN-100, Marquis Monobloc

## THE OTL'S

Joule Electra OTL's – unequalled Output Transformer-Less Tube power amplifiers in four power ratings and a variety of finishes. All share an uncommon ability to reproduce music as a living, breathing, dimensional entity.

VZN-80 "Emerald" (8 6C33's) Stereo amplifier w/outboard power supply. 80 wpc into 8 ohms 50 wpc into 4 ohms

VZN-160 "Grand Marquis" (8 6C33's per chassis) Monobloc amplifiers with inboard power supply. 160 wpc into 8 ohms 100 wpc into 4 ohms VZN-100 "Marquis" (6 6C33's per chassis) Monobloc amplifiers with outboard power supply. 100 wpc into 8 ohms 70 wpc into 4 ohms

VZN-22O "Rite of Passage" (12 6C33's per chassis) Monobloc amplifiers with inboard power supply. 225 wpc into 8 ohms 140 wpc into 4 ohms

## JOULE-ELECTRA OTL REVIEWS:

"Sneak Peek" (w/ LA-100) SoundStage, Dec. 1997, Mark Mikelson

"LA-100/VZN-80", SoundStage, Mar. 1998, Mark Mikelson

"The Joule-Electra Grand Marquis Amplifier", The Absolute Sound, Dec. 1998 pp. 97-101, Harry Pearson

"The Joule-Electra 'Rite of Passage' Output Transformerless (0TL) Tubed Monobloc Amplifiers", Golden Ear Award with comments (full review to come), *The Absolute Sound*, Dec. 2001-Jan. 2002, Harry Pearson, HP's Workshop, p. 147.

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