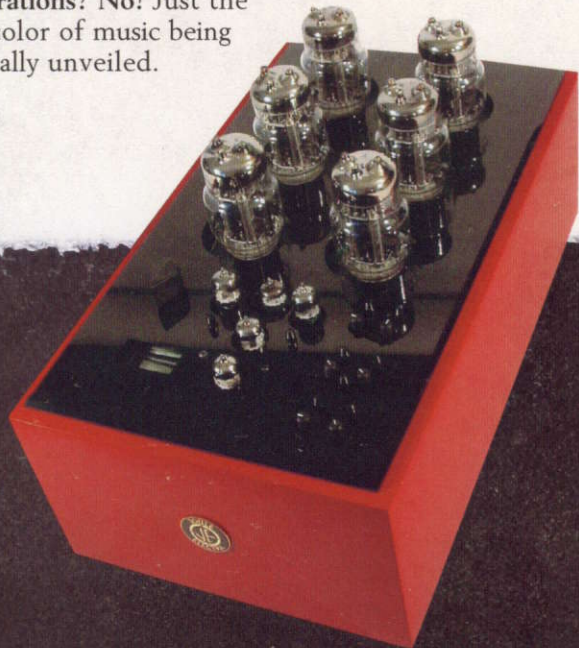


## “Destination Electronics?” YOU BET!

The past few years have found most of our customers purchasing Joule-Electra electronics as their exit from the hi-fi merry-go-round. Our components are made for people who actually listen to music and value it as the heart of their quest. Joule-Electra components are not inexpensive and they have a waiting period. We are a small-scale manufacturer and unhurriedly construct a limited number of components per year, nearly all to order. Our customers testify that the musical results are worth the time and the money. We are not trying to build pretty components; rather, our objective is building components that access music on a deeper level than was previously imagined. Joule components are not just sonic treats, they are a passport to experience music as a living, breathing entity. Joule customers are those well-versed listeners that know a system based on musical priorities, regardless of scale, will take them further into the jubilation that music offers.

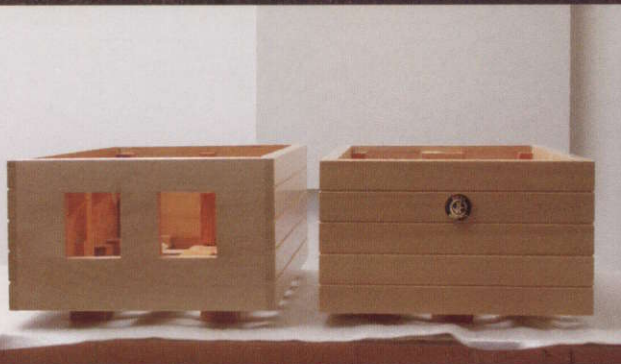
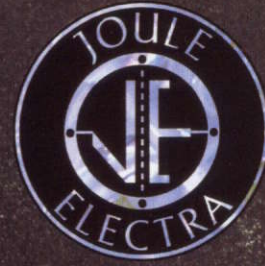
We believe vacuum tubes, which were invented for the reproduction of sound, still reproduce music with a far greater sense of it being vital and alive. This is why all of our components are all-tube based. Beyond just the sonic characteristics, music through tubes has a tactile sense of purity and realism that is compelling. There is none of the abrasion and erosion along with the bruising most often associated with alternative topologies. Contrary to some opinions, we still believe that the intense thought and true passion of music are best transmitted through the frictionless vacuum of the tube. **Romance? Yes!** To us this is not merely an intellectual exercise. Romance is why we listen in the first place, and why we keep listening.

**Colorations? No!** Just the full color of music being naturally unveiled.



HANDMADE IN

All Joule-Electra OTL amplifiers are unconstrained by output transformers, have similar sonic characteristics and come in a range of power outputs. The direct coupling of the tubes output to the speakers voice coil results in superior performance that is direct, naturally dynamic and abundantly expressive. The Joule coupled signal is single-ended, pure class A replete with full tonal color, dimensional purity and naturally quick transient response that is aftertaste free. Joules always sound fully fleshed out and resolving because they are. Output transformers involve more hardware in the signal path while fingerprinting the music regardless of their cost and implementation. Not a case of less is more. A case of less is better!



Determining output power requirements, ideally, is based upon the intended speakers' sensitivity and capability, the size of the room, and the listener's musical preferences. This relationship determines the system's overall musical balance. Music plays the system and the system plays the room! The "whole" system is the relevant consideration. There is no magic formula. One man's Beethoven is another man's **BEETHOVEN**.

The VZN-80 "Emerald" (our smallest power amplifier) delivers music with startling purity and dynamic authority that is uncommon in its utter rightness. Joined with an intelligently designed speaker of about 90db sensitivity at 8ohms or so, in a room of about 2500 cubic feet or less and fed by high-grade upstream components, the listener will revel in a musically compelling portrayal. For those listeners, that know and prize the intimacy and agility that only a high-quality modestly-sized system can provide, will luxuriate in musical communion of the first order.

The VZN-300 "Destiny" (our most powerful amplifier) is for large scale musical thrills and chills. NO other amplifier, regardless of power rating, is more musically powerful, coherent and uncannily complete. "Destiny" is a unique fusion of natural speed, harmonic splendor, effortless dynamics and self-effacing grace, making it the premier device for music amplification of large loudspeakers in large rooms. This direct communicability and astounding authority deliver music as a life-sized event that is truly dazzling. Like Katherine Hepburn with a hit man.

THE U.S.A.

Joule components are unhurriedly hand-built, in the U.S.A., using innovative approaches to construction techniques as well as circuit design. A foundation board allows energy to move in an organic manner responding in real-time to real need. This is very UN-circuit board-like in movement. The current paths reflect music driven necessities, not the pre-conceived parallelism of urban planning. Signal paths are short and concise. Wire use is internally minimized. Innovative soldering techniques improve connectivity throughout. Parts are selected for their sonic capabilities, not their "designer genes." Joule-Electra components feature the time-tested Mu follower circuit at the heart of the electronic process. This amazing circuit enables vacuum tubes to perform in their ultimate environment of infinite impedance, letting them pass and amplify music with a genuineness and body unachievable any other way.

The Joule OTL's are singular in their chassis design, voltage regulation and complement of user friendly controls. The OTL chassis, standard or Musicwood, is wood. No ringing and zippy metallic aftertaste, no weird industrial damping materials are in-play. Chassis born eddy currents are also minimized. The famous Russian 6C33 power output tube, employed in our circuitry, yields vigorous musical expression and exceptional reliability. Control of voltage supply and stability, individual bias pots for each tube, dc offset control and a variable, and highly precise, feedback control (should it be necessary) are all standard features. This offers a high degree of optimization not obtainable in other amplifiers. Joule amps enjoy a reputation for reliability and endurance. And as they settle in they improve with age, like good wine.

Two specific chassis are available for our OTL's: Standard and Musicwood. The standard chassis is constructed of marine grade plywood, covered with thick naugahyde, and uses highly effective damping feet. This is the well-damped, time-tested chassis that has been favorably received by both the press and our customers.

Our Musicwood chassis is a completely undamped structure that is lean, light and rigid featuring a high strength-to-weight ratio due to its material. No damping and no embellishment detract from or camouflage its reason for being. The Musicwood chassis is designed to be a "living cradle" for the Joule circuit and its contents and as such becomes part of the amplifier's sound. The Musicwood chassis is built of solid wood of varying thicknesses that receives a final skin of automotive paint. The interior is sealed during the painting process as well. The bottom plane is a slightly asymmetrical grid optimized for dynamic energy transfer and essential convection cooling along with runners to maximize contact with the supporting plane. We strongly encourage using isolation platforms beneath the Musicwood amplifiers. Isoplats will drain amplifier vibrations and prevent speaker generated floor and acoustic vibrations from interfering with the amplifiers active performance.

Musicwood chassis take their inspiration and construction techniques from wooden musical instruments, honest wooden architecture and early aviation. Quartersawn Sitka Spruce is at the heart of our chassis. Two cypresses, Alaskan Yellow Cedar and Port Orford Cedar, find homes in the construction of the Musicwood chassis as well. These are "soft" woods, and respond accordingly. Their energy absorption is high rate and high storage, and the energy transfer occurs at lower frequencies over a longer timeframe. We choose them for the same reasons that Sitka Spruce and POC are woods of choice for soundboards in guitars, violins, cellos, etc. They are a large part of an instrument's tonal characteristics and of our Musicwood amplifiers. These qualities give the Musicwood amplifier a sustained action that tremendously increases tonal resolution and ambience retrieval that is unachievable by any other means. This is why Joule-Electra Musicwood amplifier performance is unlike anything else, period.

