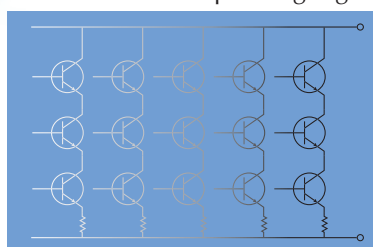




Evolution 900 Monaural Power Amplifier

Active Cascode Topology

Krell's new Active Cascode Topology™ (patent pending) is a significant departure from traditional amplifier circuits where the positive and negative rail voltages are each applied entirely across a single row of transistors. High voltage swing and gain requirements dictate that the transistors be "pushed" into non-linear operating regions and, in some cases, dangerously



close to breakdown. Krell topology divides the full voltage swing across multiple rows of transistors, and all devices are active-biased (i.e., they all carry the audio signal). The benefits of this design are manifold.

Because individual transistors in the cascode array "see" only a proportional fraction of the rail voltage, they operate in a region that provides optimum linearity, gain, and safety. And because the devices are not being pushed to their limits, the amplifier runs cooler and more reliably. The improved linearity and stability greatly reduces the need for negative feedback, which is known to cause sonic degradation. (Krell Evolution power amplifiers use only 8 dB of feedback throughout the topology—a small fraction of the amount implemented in typical designs.)



Evolution 600 Monaural Power Amplifier