



Krell Launches Radical New iBias High-Efficiency Class A Amplifiers

Innovative, patent-pending design combines the musicality of Class A with energy efficiency and a compact, rack-mountable chassis.

ORANGE, CT, USA – Krell is delighted to announce the most revolutionary design change in its 33-year history: iBias™, a patent-pending new technology that uses the Class A circuitry preferred by audiophiles yet consumes far less energy than a traditional Class A amplifier does.

Because iBias technology eliminates crossover distortion, it allows the low-level details, subtleties and spatiality of music to come through exactly as they do in a traditional Class A amplifier. Yet iBias also allows these new amplifiers to produce the almost limitless dynamics that is the hallmark of Krell's sound.

“Class A amplifiers have always been the preferred choice of audiophiles, and they’ve been a hallmark of Krell engineering for decades,” Bill McKiegan, president of Krell Industries, said. “But concerns about energy consumption have reduced some of the enthusiasm for Class A. We are now building in our Connecticut factory a new type of amplifier with musicality that surpasses that of Class A and the energy-efficiency of newer Class G and H designs. Our iBias designs deliver all of this in a surprisingly compact package – and also incorporate internet-based technology that will delight both audiophiles and systems integrators.”

The new line includes seven models, each one built into a 3U-high (5.25 in/ 134mm) chassis with removable rack-mount ears. The model numbers of the amplifiers indicate their power in watts RMS per channel into an 8-ohm load. The line includes two monoblocks, the Solo 550 and Solo 375; two stereo amps, the Duo 175 and Duo 275; the three-channel Trio 275; the five-channel Chorus 5 and the seven-channel Chorus 7.

How iBias Works

Class A amplifiers eliminate crossover distortion (the distortion that occurs when the audio signal shifts from positive to negative polarity) by operating the output transistors at full power all the time so they never shut off. Any energy not required to drive the speaker is dissipated through the amplifier's heat sinks.

In an iBias amplifier, a circuit continuously measures current flow through the amplifier's output transistors, and instantly adjusts the power (or bias) going to the transistors to suit the demands. The output transistors never shut off, yet very little power is wasted as heat. Not only does the amplifier consume less power, it runs cooler and can be built into a more compact chassis.

"The iBias amplifier is like a high-efficiency 12-cylinder automotive engine in which some of the cylinders shut down when you don't need all that power," McKiegan explained. "Just as that engine can run efficiently yet deliver 600 horsepower in an instant, the iBias amplifier can run efficiently yet in a matter of microseconds gives you hundreds of watts of full Class A bias for musical peaks."

Installation-Friendly Features

iBias amplifiers also incorporate features that make them much more practical for custom installation than most high-end amplifiers are. As mentioned previously, the amplifiers are built into relatively small, rack-mountable chassis, making them practical for use in places where a traditional Class A amplifier would likely be too large. Proper cooling is assured through the use of thermostatically controlled fans chosen specifically for their ultra-quiet operation.

In order to assure reliable, consistent operation for years, Krell has added Ethernet capability to all iBias amplifiers. Through the Ethernet connection, each amplifier can be accessed on its own web page through any device that can run a Web browser, such as a smartphone, tablet or computer. Using this interface, the dealer or customer can view heat sink temperature, fan speed, and other information, and also receive alerts for such conditions as overheating, fan failure and shorting of the output terminals.

Like the newest Krell products including the Foundation A/V Preamp Processor and the Connect Stream Player, the iBias amplifiers feature stunning industrial design with precision-machined metalwork and distinctive lines. The sleek look is enhanced by the complete absence of visible screws or fasteners on the top, front and sides.

“The iBias amplifiers have the rich, lush, elegant midrange and top end that Class A is known for, with the superb bass and dynamics that has defined the Krell sound,” McKiegan said. “iBias brings audiophile sound to integrators and the custom market, with the convenience features and energy-efficiency they need today. And while audiophiles will find them to be among the most musical amplifiers ever made, they’ll also find that their compact size and cool operation make them much more practical to own than most high-end amplifiers.”

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About Krell Industries

Founded in 1980, Krell Industries is the world's premier manufacturer of high performance audio and video equipment. Its amplifiers, preamplifiers, surround-sound processors, stream players and loudspeakers have won acclaim in countless reviews and among audiophiles worldwide. For more information, please visit www.krellonline.com.