

# **DUO 300 XD** **STEREO POWER AMPLIFIER**



**300 WATT AMPLIFIER FEATURING KRELL IBIAS TECHNOLOGY**



**300 Watt Stereo Power Amplifier with Krell iBias  
Class A Technology**

# DUO 300 XD

## 300 WATT STEREO POWER AMPLIFIER

Krell iBias Class A amplifiers are the first to deliver the rich musicality of Class A amplifiers, the uncompromised dynamics of classic Krell amplifiers, with much greater efficiency than traditional Class A amplifiers.

## DESIGN

### Circuitry Highlights

Krell iBias Class A technology allows our latest amplifiers to run in full Class A mode to full power while minimizing heat generation.

All signal gain is realized in the current domain using discrete, proprietary, multiple-output current mirrors with extraordinary open loop linearity. There are no generic integrated circuits or op amps used anywhere.

The signal path is fully complementary and balanced. Independent complementary pre driver and driver stages for the positive and negative output transistors make the output stages extremely fast and linear.

Krell amplifiers are fully direct-coupled, with no capacitors in the audio signal path. This design gives the Krell amplifiers lower internal impedance, which allows firmer, more precise control of your speakers.

### XD Explained

Krell's "XD" (Xtended Dynamics, Xtended Dimensionality, Xtended Detail) upgrade for the iBias amplifiers takes an already great sounding amplifier and raises its performance to the next level. "XD" is a classic example of Krell's continuous R&D efforts reaping benefits across multiple product lines. During the development of the K-300i Integrated Amplifier we discovered substantial sonic improvements by lowering the output impedance below traditional norms. So we applied this technique to our existing line of amplifiers and the improvement was so substantial that it required a unique designation, hence, "XD."

It was no simple matter to just lower the output impedance. This affects the amplifier's stability and transient response so each stage prior to the output stage had to be re-tuned to work optimally with the lower output impedance. This lower output impedance exerts more control over the speaker drivers and damps out unwanted vibrational modes, allowing a more accurate reproduction of the original signal.

### Power Supply Highlights

Two 700VA toroidal transformers feed amplifier modules that include the audio circuitry, rectifier, and power supply filtering mounted to an individual heat sink.

This design shortens the electrical path from the power supply to the output transistors, reducing the overall impedance and allowing the circuit to respond faster and control the speakers better and more accurately.

### Feature Highlights

Network connectivity brings convenience, monitoring, and reporting to end users from any smartphone, tablet, or laptop.

Amplifier configuration options include display brightness and timeout. For energy conservation, the amplifiers can be programmed to power off at a preset time of inactivity. Individual channels can be muted and firmware updates can be initiated from the web server.

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## SPECIFICATIONS

- 300 Watts into 8 Ohms
- 2 ea - Single-ended RCA and Balanced XLR Inputs
- 1 RJ45 Ethernet Port
- 1 12V Trigger Input
- WBT Speaker Binding Posts
- Optional Rack Mount Kit
- 17" (43.3cm) W x 7" (17.7cm) H x 21" (53.1cm) D
- Weight: 75lb (33kg)



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