

# Illusion II Preamplifier



Stereo Preamplifier featuring Krell Current Mode design  
with 24 bit/192kHz LPCM Digital module

# Illusion II Preamplifier

The Illusion II is the perfect centerpiece for a world class digital and analog audio system. Added to the normal selection of balanced and single-ended inputs are five digital inputs. The digital module features AES/EBU, coaxial, and optical digital inputs for use with streaming devices or other digital sources.

## DESIGN

### Circuitry Highlights

The Illusion II preamplifier is a dual monaural design with the left and right channels afforded their own power supply regulation and individual circuit boards. All signal gain is executed with surface mount technology using proprietary multiple-output current mirrors with nearly 500 times the open loop linearity of other designs. Featuring 700 kHz bandwidth in a zero feedback, balanced, Krell Current Mode design, the Illusion II shares the same design philosophy as its bigger brother, the flagship Illusion preamplifier. Negative feedback is not used anywhere in the preamp, nor is it necessary. Open-loop distortion is typically less than 0.003%. The volume control is realized with a balanced resistor ladder - bandwidth and transient response of the preamp circuitry are virtually unaffected by the volume setting. The headphone circuitry is identical to the main circuitry, offering private listening with the same performance as speaker playback.

### Digital Module Highlights

The digital module supports up to 24 bit/192kHz LPCM. All digital signals are fed to an ESS Sabre DAC and then sent to Krell's Current Mode, discrete, balanced analog circuitry.

### Power Supply Highlights

Oversized for a preamplifier, the power supply features a 95 VA transformer and 40,000  $\mu\text{F}$  of capacitance giving it the ability to respond quickly to musical demands. The large power supply improves noise rejection and renders the Illusion II impervious to all but the most severe AC voltage power fluctuations. A new eco-friendly standby mode reduces power consumption to 2W.

---

## SPECIFICATION HIGHLIGHTS

- 3 pr. balanced via XLR connectors input/output
- 4 pr. single-ended via RCA connectors input/output
- 1 AES/EBU via XLR connectors digital input
- 2 coaxial via RCA connectors digital input
- 2 optical via Toslink connectors digital input
- 3ea 12V Trigger input/output
- 1 RS-232 input via 9-pin D-subminiature connector
- 1 remote IR detector input via 3-conductor 3.5 mm connector
- 1 Headphone output via 3-conductor 6.35 mm (1/4 in) connector
- Optional Rack Mount Kit
- 17.3 in W x 3.8 in H x 18.3 in D
- 43.8 cm W x 9.7 cm H x 46.4 cm D



Krell Industries, LLC. • 45 Connair Road • Orange, CT 06477-3697 USA  
Tel: 203-298-4000 • Fax: 203-799-9796 • Sales Dept: 203-298-4010 • [contact@krellonline.com](mailto:contact@krellonline.com) • [www.krellonline.com](http://www.krellonline.com)

*All operational features, functions, specifications, and policies are subject to change without notice.*

Krell® is a registered trademark of Krell Industries, LLC., and is restricted for use by Krell Industries LLC., its subsidiaries, and authorized agents. All other trademarks and trade names are registered to their respective companies. © 2014 by Krell Industries, LLC. All rights reserved.