



Home Theater Standard

*Home Theater
Surround Preamp/
Processor*



Surround by Krell.

Highlights

- Krell Current Mode discrete Class A direct-coupled circuitry with balanced outputs
- User-configurable input assignment and system macros
- Flexible, upgradable modular architecture
- Broadcast-quality switching and circuitry
- Infrared remote control, RS-232, and PHAST Link communications ports, plus RC-5 baseband and 12 VDC (12 V trigger) trigger interfaces
- Dolby Digital (AC-3), Dolby Pro Logic, and DTS decoding, and Krell Music Surround modes
- Main and remote zone capability
- Robust engineering and handcrafted quality in the Krell tradition

*The new
standard for
high-performance
home theater
systems.*

Krell HEAT Design

HEAT stands for High End Audio Theater. HEAT draws on Krell's rich heritage of designing and producing state-of-the-art preamplifiers and amplifiers for stereo music and extends these engineering techniques to contemporary multi-channel home entertainment systems.

A fundamental design parameter of high performance stereo music systems is the ability to recreate a three-dimensional soundstage from a stereo source and two loudspeakers. As the hub of the system, the preamplifier must convey the width, depth, and height of the soundstage. Krell engineering is well known for high-end preamplifiers that excel in soundstage reproduction. In the home theater arena, we apply this approach to the Home Theater Standard to create a three-dimensional soundstage between each of the multiple speakers in a surround sound system. Together these sound stages envelop the listener in a home theater performance that is unmatched in its realism and excitement.

A Krell HEAT system is an integrated home theater system consisting of a state-of-the-art Krell pre-amp processor and matching amplifiers that reproduce two channel and multi-channel sources with audiophile sound quality, placing the audience in the middle of a lifelike environment.

HTS

Krell Sound Quality

In 1997, Krell introduced HEAT (High End Home Theater) and revolutionized the home theater experience. Krell HEAT proves it is possible to enjoy movies at home with audio quality not available at even the finest commercial theater venues. HEAT systems based on the award-winning Audio+Video Standard and Krell's world-renowned Full Power Balanced series of amplifiers present the sonic realism of the concert hall and the excitement of the latest action thriller.

Today, home theater enthusiasts seeking the benefits of a Krell HEAT system have another choice. The Krell Home Theater Standard is a full system control center offering exceptional audio and video performance, flexibility, and ease of use. It is the ideal component around which to build a home theater system of superior quality caliber. It is also the perfect way for existing owners of Krell music systems — driven by either KAV-Series or Full Power Balanced components — to add home theater capability and enjoy the finest in multichannel surround sound entertainment. The Home Theater Standard provides a full complement of balanced audio outputs, extensive control capabilities, advanced yet highly user-friendly operating features, unsurpassed compatibility, and unique upgradability. With its unrivaled audio and video performance, elegant design, and meticulous craftsmanship, the Home Theater Standard is unmistakably Krell.

Krell Performance

The underlying principle of the HEAT concept is disarmingly simple: the design requirements that govern the engineering of preamplification, signal processing, and power amplification for stereo systems apply directly to home theater. The

pursuit of sonic virtues — tonal accuracy, unrestricted dynamic range, transparency, and detail — remains the same regardless of the number of channels.

The Home Theater Standard exemplifies these design goals. With high-quality program sources — whether music or cinema soundtracks — the Home Theater Standard delivers sound reproduction of unexcelled clarity, purity, and power



A bird's eye view of the interior of the Home Theater Standard, showing its modular design.

through all channels. This exceedingly high level of sonic performance is in large measure attributable to uncompromising Krell Current Mode circuit design. All six channels of analog preamplification employ this topology, which features proprietary output devices that are specifically selected for sound reproduction and bear the Krell name along with the Motorola logo. These low-noise, wide-

bandwidth, high-linearity devices are operated at their ideal Class A bias points to ensure extremely low distortion. The result is high-current output drive capability without the attendant high noise and non-linearity of typical designs. This direct-coupled, discrete component circuit design assures Krell's unmatched sonic excellence.



INSET
The Home Theater Standard handheld remote.

Sophisticated System Integration

The ability of the Home Theater Standard to function as a full-system control center is enhanced through the incorporation of several advanced interface features. These interfaces enable the Home Theater Standard to be seamlessly integrated into complex custom installations and whole-house systems:

RS-232 Port — A standard serial communications port that enables the Home Theatre Standard to be operated by computer-based systems and other intelligent external control devices

PHAST Link Input and Output — And industry-standard communications port for receiving and sending remote operating commands

RC-5 Input — An input for RC-5 baseband signals, often used with hard-wired remote controllers in custom installations

12 VDC Output and Input — Four outputs and one input for 12 VDC (12 V trigger) commands to and from other Krell components, enabling the entire system to be turned on or off with a single pushbutton

Modular Architecture

The Home Theater Standard is virtually impervious to obsolescence because of its modular, easily upgradable design. The input, output, video, and digital signal processing stages all reside on removable modules. As new digital surround sound encoding/decoding technologies are standardized and other technical enhancements become available, the Home Theater Standard can be updated with plug-in circuit modules. This advanced design ensures continuing source compatibility and state-of-the-art performance well into the future.

A full complement of input and output connections enable the Home Theater Standard to be easily integrated into any home theater system.

*INSET
Home Theater Standard system integration.*



Full Surround Compatibility

Krell's state-of-the-art digital audio engineering ensures the highest reproduction quality regardless of program source. The sophisticated digital signal processing circuitry in the Home Theater Standard is capable of decoding Dolby Digital (AC-3), Dolby Pro Logic, and DTS surround sound with exceptional accuracy. This makes the Home Theater Standard compatible with the full spectrum of digital and analog audio/video program sources, including the newest DVD software and future digital TV broadcasts. The selection of the appropriate decoding mode is performed automatically according to the source signal, further enhancing ease of operation. Also included is Krell Music Surround circuitry, which can be used for surround sound reproduction with conventional stereo sources. Nine user-selectable settings are provided, each of which can create different simulated acoustic environments. All signal processing is performed in the digital domain, ensuring the highest sound quality.

The Krell Tradition

The Home Theater Standard joins the Krell Audio+Video Standard to break through the performance limitations imposed by multichannel audio/video components of the past. The Home Theater Standard defines new benchmarks for surround sound reproduction quality, ease of use, control functionality, system configuration versatility, and upgradability. With balanced connections to Krell power amplifiers, such as the KAV-Series of amplifiers, the Home Theater Standard becomes the remarkable centerpiece of an incomparable high-performance surround sound system. Meticulously crafted, protected from obsolescence, and engineered to the highest standard in the industry, it is a compelling audiophile solution to home theater. The Home Theater Standard is undeniably Krell — part of a legacy that comprises the finest components in the world.

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Specifications

SIGNAL TO NOISE RATIO
"A" WEIGHTED
93 dB

TOTAL HARMONIC DISTORTION (THD) UNWEIGHTED
20 Hz-20kHz, -88 dB

INPUTS
ANALOG AUDIO
1 pair balanced via XLR connectors
5 pairs single-ended via RCA connectors

DIGITAL AUDIO
6 coaxial via RCA connectors
2 EIAJ optical via TosLink connectors

VIDEO
4 S-video via DIN connectors
4 composite via RCA connectors
2 component via RCA connectors

ANALOG TAPE
1 pair single-ended via RCA connectors

OUTPUTS
ANALOG CHANNEL
6 balanced via XLR connectors
(one per channel)
6 single-ended via RCA connectors
(one per channel)
1 multi-channel via a DB-25 connector

ANALOG TAPE
1 pair single-ended via RCA connectors

DIGITAL
1 coaxial via RCA connectors
1 EIAJ optical via TosLink connectors

VIDEO
2 S-video via DIN connectors
2 composite via RCA connectors
1 component via RCA connectors

ZONE 2
1 pair single-ended via RCA connectors

REMOTE CONTROL
1 infrared

REMOTE CONNECTORS
INPUTS
1 RS-232
1 PHAST Link
1 RC-5
1 12 VDC (12 V trigger)

OUTPUTS
1 PHAST Link
4 12 VDC (12 V trigger)

DECODING MODES
Dolby Pro Logic
Dolby Digital (AC-3)
DTS Digital Surround Sound

SURROUND ENHANCEMENT MODES
9 Krell Music Surround modes

DIMENSIONS
19.0w x 6.0h x 15.0d in.
48.3w x 15.3h x 38.1d cm

WEIGHT
Shipping 25lb., 11.34 kg
Unit Only 16lb., 7.26 kg

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

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