KRELL

THE LEADER IN AUDIO ENGINEERING

Home Theater Standard

Surround Preamp/Processor

Instructions for Use

Owner's Reference

Home Theater Standard

Surround Preamp/Processor

Instructions for Use

v 01.2

Krell Industries, Inc.
45 Connair Road
Orange, CT 06477-3650 USA

TEL 203-799-9954
FAX 203-891-2028
E-MAIL krell@krellonline.com
WEBSITE http://www.krellonline.com

CE

This product complies with the EMC directive (89/336/EEC) and the low-voltage directive (73/23/EEC).

WARNINGS

The Home Theater Standard must be placed on a firm level surface where it is not exposed to dripping or splashing.

The ventilation grids on the top and bottom of the Home Theater Standard must be unobstructed at all times during operation. Do not place flammable material above or beneath the component.

Do not remove or bypass the ground pin on the end of the AC power cord. This could cause radio frequency interference (RFI) to be introduced into your playback system.

Before making connections to The Home Theater Standard, make sure the back panel power switch is off. Make sure all cable terminations are of the highest quality and free from frayed ends, short circuits, or cold solder joints.

THERE ARE NO USER SERVICEABLE PARTS INSIDE ANY KRELL PRODUCT.

Please contact your authorized Krell dealer, distributor, or Krell if you have any questions not addressed in this Owner's Reference.

P/N 305218

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Illustrations

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Introduction

Thank you for your purchase of the Krell Home Theater Standard Surround Preamp/Processor.

The Home Theater Standard provides optimum music and cinema soundtrack reproduction quality through Krell Current Mode, discrete Class A direct-coupled circuitry, and balanced outputs on all six channels. Broadcast quality switching and circuitry—including component video, S-video, and composite video—ensure unmatched video performance. Built-in Dolby Digital, Dolby Pro Logic, and DTS decoding make the Home Theater Standard compatible with virtually any surround sound source, including digital videodisc (DVD) software and digital television broadcasts.

Dual zone capability gives you a variety of configuration possibilities for whole-house systems. A handheld remote control, RS-232 and optional PHAST Link communications ports, RC-5 baseband, and 12 VDC input/output (12 V trigger) interface integrate the Home Theater Standard into any system. The Home Theater Standard's flexible, modular architecture allows you to upgrade hardware and software to accommodate future surround sound formats and design enhancements.

The owner's reference manual contains important information on placement, installation, and operation of the Krell Home Theater Standard. Please read this information carefully. A thorough understanding of these details helps ensure satisfactory operation of and long life for your Home Theater Standard and related system components.

Definition of Terms

Following are the definitions of key terms used in your owner's reference manual.

INPUT AND OUTPUT CONNECTIONS

Balanced

A symmetrical input or output circuit that has equal impedance from both input terminals to a common ground reference point. The industry standard for professional and sound recording installations, balanced connections have 6 dB more gain than single-ended connections and allow the use of long interconnect cables. Balanced connections are completely immune to induced noise from the system or the environment.

Definition of Terms, continued

Multi-channel (DB-25)
A balanced input or output circuit that allows for the simultaneous connection of all audio outputs plus one 5 VDC (5 Volt trigger) via a single cable. DB-25 inputs and outputs are becoming popular for connecting an audio/video surround sound processor and power amplifiers, simplifying the integration of the two components into your system.

Single-ended
A two-wire input or output circuit. Use care when using single-ended connections as the ground connection is made last and broken first. Turn the system off prior to making or breaking single-ended connections. Single-ended connections are not recommended for connections requiring long cable runs.

OPERATION

Off
When the power switch on the back panel is placed in the down position and LEDs turn off, the component is off.

Stand-by Mode
When the HTS is connected to AC power and the back panel power switch is in the up (on) position, the red stand-by LED illuminates. This indicates that the component is in stand-by mode, a low power consumption status that keeps the audio and regulator circuits at idle. Krell recommends leaving the component in the stand-by mode when it is not playing music.

Operational Mode
When the component is in the stand-by mode, and you press the power button on the front panel or the power key on the remote control, the blue power LED illuminates. The component is in the operational mode and is ready to play music.

TECHNOLOGY

Krell Current Mode
A proprietary Krell circuit topology in which the audio gain stages of a component operate in the current rather than the voltage domain. This unique technology provides the component with exceptional speed and a wide bandwidth.

Krell HEAT

The Krell term HEAT, or High End Audio Theater, is a design application incorporated into Krell components to enhance multi-channel home entertainment systems. A Krell HEAT system is an integrated home theater system consisting of a state-of-the-art Krell preamp/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.

Unpacking

Open the box and remove the top layer of foam. You see these items:

1 Home Theater Standard

1 IEC connector (AC power) cord

1 Home Theater Standard handheld remote control

1 CR2025 lithium battery

1 T-15 Torx wrench (small "L" type)

1 T-10 Torx wrench (small "L" type)

1 12 VDC output (12 V trigger) cables

1 packet containing the owner's reference manual, the RS-232 Port developer's reference, the "read this first" insert, and the warranty registration card.

Carefully remove the unit and accessories from the box. Remove the foam end caps and protective plastic wrap from the unit.

Note

If any of these items are not included in the shipping box, please contact your authorized Krell dealer, distributor, or Krell for assistance. Save all packing materials. If you must ship your Home Theater Standard in the future, repack the unit in its original packaging to prevent transit damage. See ***Return Authorization Procedure,*** *on page 58.*

Placement

Before you install the Home Theater Standard into your system, review the following guidelines to choose the location for the component. This will facilitate a clean, trouble-free installation.

The Home Theater Standard does not require any type of special rack or cabinet for installation. For the dimensions of your Home Theater Standard see ***Specifications,*** on pages 59–60.

The Home Theater Standard requires at least two inches (5 cm) of clearance on each side and at least two inches (5 cm) of clearance above and below the component to provide adequate ventilation. Further, the Home Theater Standard requires at least three inches (7 cm) of clearance between other connected components. For installations inside cabinetry, extra ventilation may be necessary.

AC POWER GUIDELINES

The Home Theater Standard has superb regulation and does not require a dedicated AC circuit. Avoid connections through extension cords or multiple AC adapters. High quality 15 amp grounded AC strips are acceptable. High quality AC line conditioners or filters may be used if they are grounded.

Power Cord

The Home Theater Standard should be used only with the power cord supplied. Contact your authorized Krell dealer, distributor, or Krell before using any devices designed to alter or stabilize the AC power for the Home Theater Standard.

Getting Started

READ THIS FIRST

Perform the following steps to make the On-Screen Display (OSD) viewable on your video monitor. The video format and video signals of the Home Theater Standard and the video monitor need to match before the OSD is viewable. The video format of the video signal can be set to either NTSC or PAL.

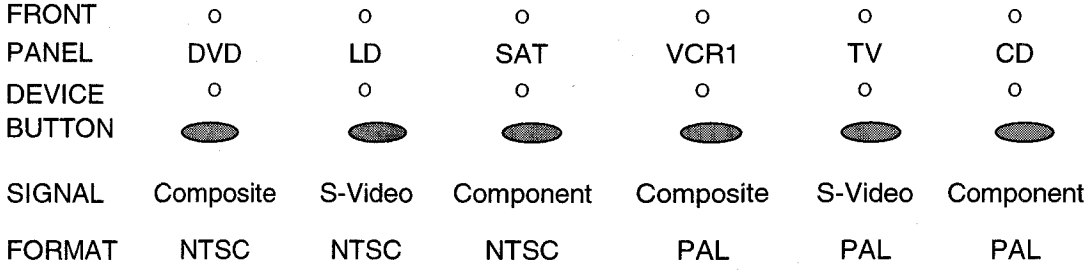
The following table details the different video signals and video formats supported by the Home Theater Standard:

Video Signal	Type of Connector	Most Commonly Labeled As	Format Standard
Composite	Single-Ended RCA	Video, Composite	NTSC or PAL
S-Video	DIN	S, SV, S-Video	NTSC or PAL
Component	3 Single-Ended RCA	Y, Cr, Cb	NTSC or PAL

To select the initial video signal and video format:

1. Connect your video monitor to the video output connectors on the Home Theater Standard that corresponds to the input connectors on your video monitor (refer to the above table).
2. Power on the Home Theater Standard by switching the back panel power switch to on. Wait for the HTS to initialize. Then press the power button on the front panel.

The following diagram shows the front panel device buttons on the Home Theater Standard and the default video signals and video formats associated with each button:



3. Press the front panel device button that matches both the video format and video signal compatible with your connected video monitor (refer to the above diagram). This becomes the currently selected video signal output.

4. Verify that the video monitor's video signal input corresponds to the Home Theater Standard video signal output. Press the menu key on the remote control to verify that the OSD is now viewable on the video monitor. The system configuration main menu appears when the video format and video signals between the Home Theater Standard and your video monitor are compatible.

If you have any questions regarding the selection of the video format, please call your authorized Krell dealer, distributor, or Krell.

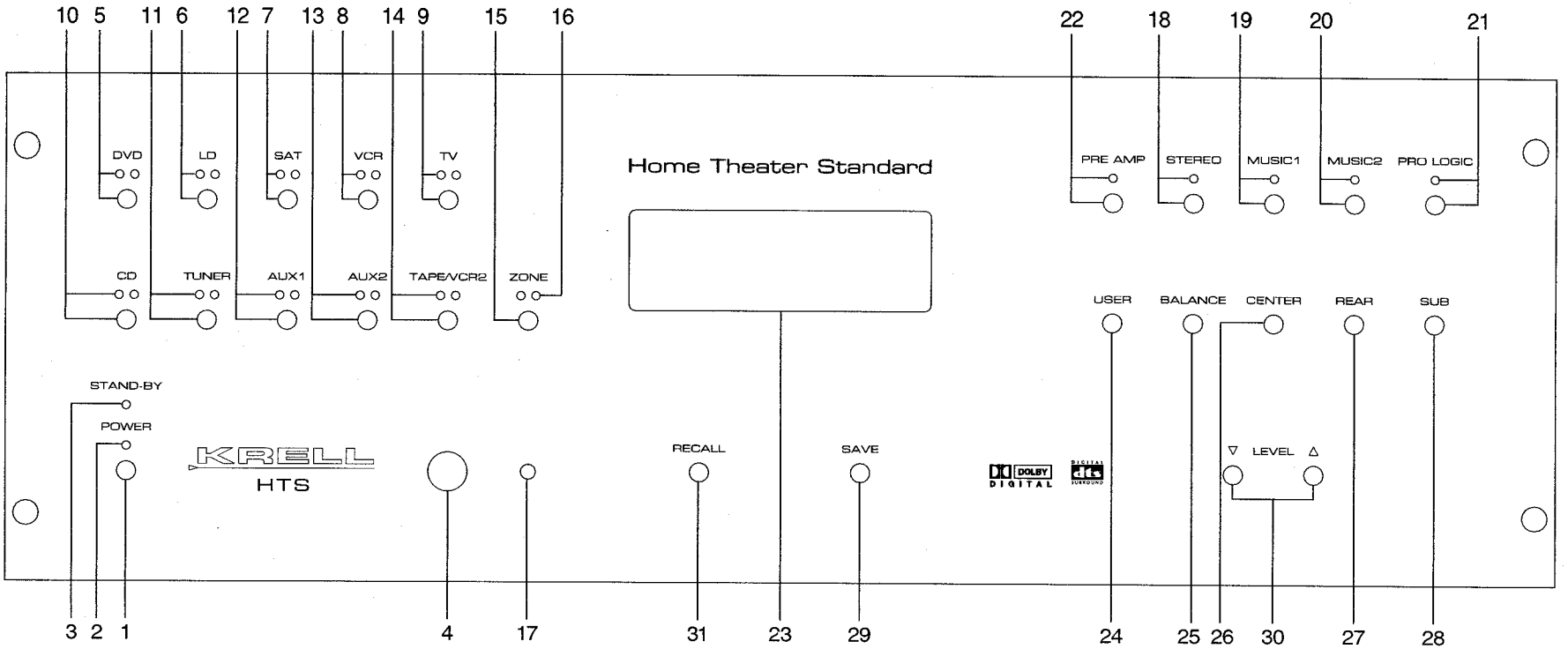
AN INTRODUCTION TO SYSTEM SETUP

The Home Theater Standard provides a variety of connection and operation options for outstanding music and cinema soundtrack reproduction. To take full advantage of the features the Home Theater Standard offers, you'll need to set up your system in this order:

1. Connect your Home Theater Standard to the desired analog and digital audio sources, video sources, and amplifiers. See ***Connecting the Home Theater Standard to Your System,*** on page 23.
2. Configure your Home Theater Standard's speaker volume, input devices, and trims using the built-in, easy-to-follow System Setup and Configuration menus. Step-by-step instructions begin on page 26, ***System Setup and Configuration.***
3. Review the Front Panel, Back Panel, and Remote Control descriptions for information on input, zone, and mode selections, speaker adjustment, input and output connections for analog, digital, and video sources, and remote control operation. See pages 7–22 for illustrations and descriptions.

After you've connected and configured your Home Theater Standard and know its basic features, you're ready to go. See ***Operating the Home Theater Standard,*** on page 53.

Figure 1 The Home Theater Standard Front Panel



Basic Operation

1 Power Button
2 Power LED
3 Stand-by LED
4 Infrared Sensor

Input Device Selection Buttons and LEDs

5 DVD Button and LEDs
6 LD Button and LEDs
7 SAT Button and LEDs
8 VCR1 Button and LEDs
9 TV Button and LEDs
10 CD Button and LEDs
11 Tuner Button and LEDs
12 Aux1 Button and LEDs
13 Aux2 Button and LEDs
14 Tape/VCR2 Button and LEDs
15 Main Zone and Zone 2 Button
16 Main Zone and Zone 2 LEDs
17 Infrared Emitter

Processing Mode Buttons and LEDs

18 Stereo Button and LED
19 Music1 Button and LED
20 Music2 Button and LED
21 Pro Logic Button and LED
22 Preamp Button and LED
23 Front Panel Display
24 User Button
25 Balance Button

Individual Channel Buttons

26 Center Button
27 Rear Button
28 Sub Button
29 Save Button
30 Level Down and Up Buttons
31 Recall Button

Front Panel Description

See Figure 1 on page 7

The Home Theater Standard front panel provides power on and off; input, zone, and processing mode selection; monitoring and display of processor status; and balance and volume control. The front panel components are described below.

Basic Operation

1 Power Button

The power button switches the Home Video S tandard from the stand-by to the operational mode.

Note

When you power off while zone 2 is selected, only zone 2 turns off. Press the power button or HTS key a second time to power off the main zone.

2 Power LED

The blue power LED illuminates when the Home Theater Standard is in the operational mode.

3 Stand-by LED

The red stand-by LED illuminates when the back panel power switch (54) is on, indicating that the Home Theater Standard is in stand-by mode. Krell recommends that the back panel power switch remain in the up position at all times.

4 Infrared Sensor

The infrared sensor receives commands from the Home Theater Standard remote control. For proper remote control operation, make sure the infrared sensor is not covered or obstructed.

Input Device Selection Buttons and LEDs

When properly configured, the Home Theater Standard keeps track of each device and its associated connections. For example, DVD uses Coax1 for digital audio, Composite1 for video, and S-1 for analog audio. The Home Theater Standard automatically engages the correct inputs when you press a front panel device selection button.

The Home Theater Standard is equipped with the following input selections, which allow you to select the device connected to your Home Theater Standard. Above each device are two LEDs: one red and one green. The red LED illuminates when the input is engaged and playing in the main zone. The green LED illuminates when the input is engaged and playing in zone 2.

5 DVD Button and LEDs

Use this button to select the digital videodisc device.

Front Panel Description, continued

6 LD Button and LEDs

Use this button to select the laser disc device.

7 SAT Button and LEDs

Use this button to select the satellite feed device.

8 VCR1 Button and LEDs

Use this button to select the VCR device.

9 TV Button and LEDs

Use this button to select the television device.

10 CD Button and LEDs

Use this button to select the compact disc device.

11 Tuner Button and LEDs

Use this button to select the AM/FM tuner device.

12 Aux1 Button and LEDs

Use this button to select an auxiliary device, such as phono, tape, or an additional DVD, LD, CD, or VCR.

13 Aux2 Button and LEDs

Use this button to select a second auxiliary device, such as phono, tape, or an additional DVD, LD, CD, or VCR.

14 Tape/VCR2 Button and LEDs

Use this button to playback pre-recorded tapes. You may also use this button to compare the output signal of an analog tape recorder to an audio source. See ***Tape Input and Output,*** on page 53.

15 Main Zone and Zone 2 Button

Use this button to select either main zone or zone 2 device control. See ***Main Zone and Zone 2 Operation,*** on page 54.

16 Main Zone and Zone 2 LEDs

The Home Theater Standard has two zone device controls, main or zone 2. Above each device are two LEDs: one red and one green. The red LED illuminates when the input is engaged and playing in the main zone. The green LED illuminates when the input is engaged and playing in zone 2.

17 Infrared Emitter

Emits the Home Theater Standard remote operation code to a learning remote, which can be programmed to operate the Home Theater Standard. See ***Program Remote,*** on page 48.

Processing Mode Buttons and LEDs

18 Stereo Button and LED

Use this button to select the stereo decoding mode, which allows you to listen to a stereo recording in two channel (left and right) mode. The red LED illuminates when this mode is activated.

Note

The stereo decoding mode operates only with an analog input or a digital PCM input (for example, a compact disc).

19 Music1 Button and LED

20 Music2 Button and LED

Use these buttons to engage Krell Music Surround mode. This music-decoding mode allows you to listen to a stereo recording in a multi-channel mode. This mode can also be programmed to create different simulated acoustic environments. The red LED illuminates when this circuitry is engaged. See ***Configure Music***, on page 47.

Note

The Krell Music Surround decoding mode operates only with an analog input or a digital PCM input (for example, a compact disc).

21 Pro Logic Button and LED

Use this button to engage Dolby Pro Logic circuitry for use with all Dolby Surround encoded material, including laser discs, videotapes, television broadcasts, and compact discs. The red LED illuminates when the Home Theater Standard is in the Dolby Pro Logic decoding mode.

Note

This mode is selected automatically if Dolby Digital source material is encoded for Pro Logic. If you wish to turn off this mode, press the Pro Logic button.

22 Preamp Button and LED

Use this button to send the signal from the analog input directly to the volume control, with no digital processing, using the analog stage of the preamp. This avoids possible digital signal degradation and can be used for components with a high quality signal such as the KPS 28c. See ***Configure Mode,*** on page 36, for information on assigning the analog input to one of the device buttons (DVD, LD, SAT, VCR, TV).

Front Panel Description, continued

23 Front Panel Display

The front panel display provides status messages for Home Theater Standard operations, including volume and balance level, decoding mode, and zone information. In addition, when a new device is selected, the physical inputs are displayed. The display turns off after five seconds of inactivity.

24 User Button

Use this programmable button to select one of three available dynamic range compression modes: normal (11 dB), max(imum) (no compression), or night (22 dB). See ***User Button Setup,*** on page 50. In addition, the user button can be deactivated.

25 Balance Button

Press this button to adjust the main left/right speaker balance. This button converts the volume level controls to balance controls. BAL 0 in the front panel display window indicates the center position. Balance may be adjusted in .5 dB increments, up to 6 dB. Balance levels are shown numerically on the front panel display. The balance level buttons revert to their original functions as main volume level controls after three seconds of inactivity.

Individual Channel Buttons

Use the Center, Rear, and Sub buttons to change taste trims (make temporary speaker output adjustments of +/- 10 dB). These temporary changes revert to 0 dB when a new device is selected or the system is powered down. For more information on taste trims and master (programmable) trims, see ***Configure Level Adjustment,*** on page 39.

26 Center Button

Press the center button, then use the level up and down buttons (30) to adjust the center speaker volume.

27 Rear Button

Press the rear button, then use the level up and down buttons (30) to adjust the rear speaker volume.

28 Sub Button

Press the sub (subwoofer) button, then use the level up and down buttons (30) to adjust the subwoofer speaker volume.

29 Save Button

Use this button to save system configuration settings and during learning remote programming. See ***Saving Setup, Recalling Setup, and Restoring Factory Default System Configuration Settings***, on page 52, and ***Program Remote***, on page 48.

Front Panel Description, continued

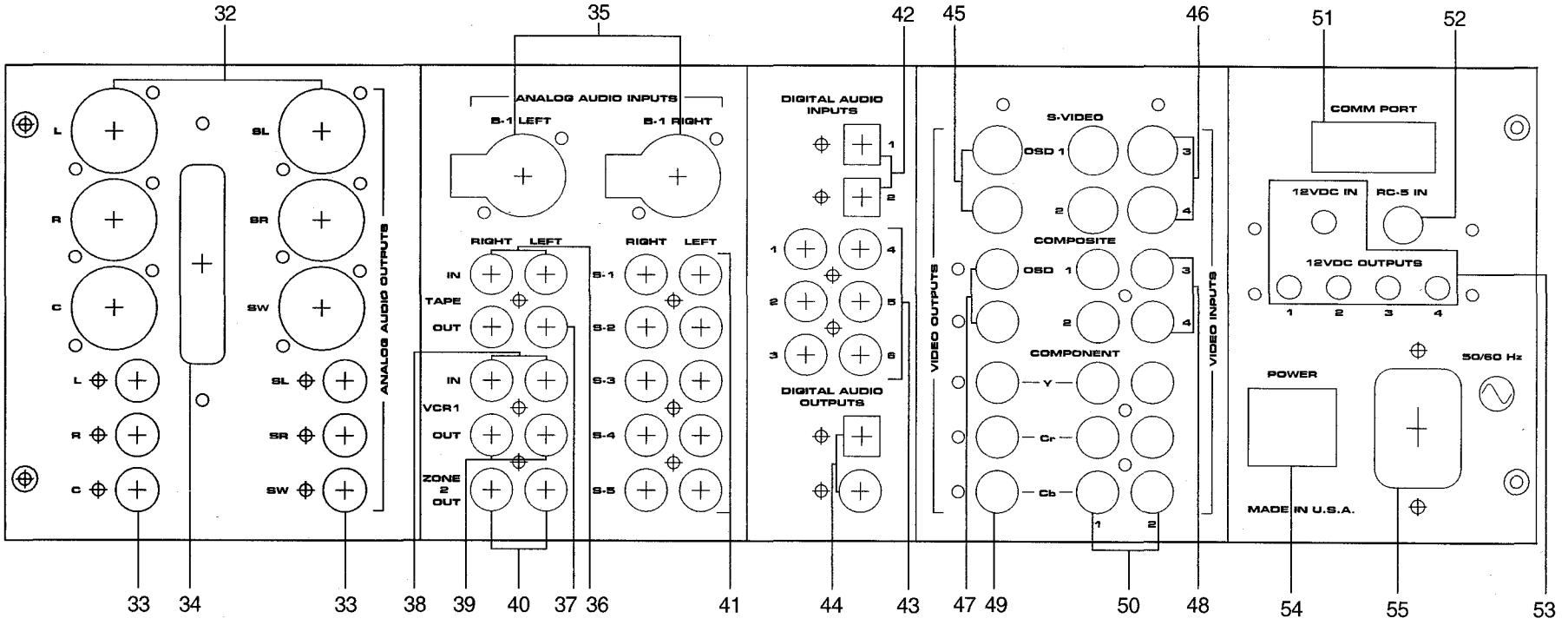
30 Level Down and Up Buttons

Use the volume level buttons to adjust the output for the entire system as well as balance and individual levels for the center speaker, rear speakers, and subwoofers. The volume level is shown in the front panel display. See ***System Setup and Configuration,*** on page 26.

31 Recall Button

Use this button to recall previously stored system configuration settings. See ***Saving Setup, Recalling Setup, and Restoring Factory Default System Configuration Settings,*** on page 52.

Figure 2 The Home Theater Standard Back Panel



Analog Audio Outputs and Inputs

32 Balanced Analog Audio Outputs
33 Single-ended Analog Audio Outputs
34 Multi-Channel Audio Output Connector
35 B-1 Left and B-1 Right Inputs
36 Tape In Left and Right
37 Tape Out Left and Right
38 VCR1 In Left and Right
39 VCR1 Out Left and Right
40 Zone 2 Out Left and Right
41 S-1, S-2, S-3, S-4, S-5 Left and Right Inputs

Digital Audio Inputs and Outputs

42 Digital Optical Inputs
43 Digital Audio Inputs
44 Digital Audio Outputs

Video Inputs and Outputs

45 S-video Outputs
46 S-video Inputs
47 Composite Video Outputs
48 Composite Video Inputs
49 Component Video Outputs
50 Component Video Inputs

Remote Control

51 RS-232 Remote or
Optional PHAST Link Connector
52 RC-5 In
53 12 VDC Out and In

Power

54 Back Panel Power Switch
55 IEC Connector

Back Panel Description

See Figure 2 on page 13

The back panel of the Home Theater Standard provides all input and output connections, remote control inputs and outputs, power on and off, and power connection. The back panel functions are described below.

Analog Audio Outputs and Inputs

32 Balanced Analog Audio Outputs

The Home Theater Standard is equipped with six balanced analog audio channel outputs, with XLR connectors, for the left, center, right, left rear, right rear, and subwoofer.

33 Single-ended Analog Audio Outputs

The Home Theater Standard is equipped with six single-ended analog audio channel outputs, with RCA connectors, for the left, center, right, left rear, right rear, and subwoofer.

34 Multi-Channel Audio Output Connector

The Home Theater Standard is equipped with a multi-channel audio output, with a DB-25 connector, which contains the output connections for all the output channels (left, center, right, left rear, right rear, and subwoofer).

35 B-1 Left and Right Inputs

The Home Theater Standard is equipped with one set of balanced inputs with XLR connectors.

The XLR pin configurations are as follows:

Pin 1: Shield (ground)

Pin 2: Non-inverting (0°)

Pin 3: Inverting (180°)

36 Tape In Left and Right

The Home Theater Standard is equipped with one set of single-ended tape inputs with RCA connectors.

37 Tape Out Left and Right

The Home Theater Standard is equipped with one set of single-ended tape outputs with RCA connectors.

38 VCR1 In Left and Right

The Home Theater Standard is equipped with one set of single-ended inputs with RCA connectors, for a VCR audio source.

Back Panel Description, continued

39 VCR1 Out Left and Right

The Home Theater Standard is equipped with one set of single-ended outputs with RCA connectors, for a VCR audio source.

40 Zone 2 Out Left and Right

The Home Theater Standard is equipped with one set of single-ended zone 2 audio outputs with RCA connectors.

41 S-1, S-2, S-3, S-4, S-5 Left and Right Inputs

The Home Theater Standard is equipped with five sets of single-ended audio inputs with RCA connectors.

Digital Audio Inputs and Outputs

42 Digital Optical Inputs

The Home Theater Standard is equipped with two digital EIAJ optical inputs with TosLink connectors.

43 Digital Audio Inputs

The Home Theater Standard is equipped with six coaxial digital audio inputs with RCA connectors.

44 Digital Audio Outputs

The Home Theater Standard is equipped with two digital audio outputs: one coaxial with an RCA connector, and one EIAJ optical with a TosLink connector.

Video Inputs and Outputs

45 S-video Outputs

The Home Theater Standard is equipped with two S-video outputs with DIN connectors. The main S-video output (labeled OSD on back panel) includes on-screen display. For dubbing purposes, the second S-video output does not include on-screen display.

Note

The OSD and non-OSD outputs are not interchangeable.

46 S-video Inputs

The Home Theater Standard is equipped with four S-video inputs with DIN connectors.

47 Composite Video Outputs

The Home Theater Standard is equipped with two composite video outputs with RCA connectors. The main composite video output (labeled OSD on back panel) includes on-screen display. For dubbing purposes, the second composite video output does not include on-screen display.

48 Composite Video Inputs

The Home Theater Standard is equipped with four RCA composite video inputs with RCA connectors.

49 Component Video Outputs

The Home Theater Standard is equipped with one set of component video outputs with RCA connectors. Component video uses three wires (labeled Y, Cr, and Cb on back panel) to convey the video signal, including the OSD.

50 Component Video Inputs

The Home Theater Standard is equipped with two sets of component video inputs.

Remote Control

51 RS-232 Remote or Optional PHAST Link Connector

The Home Theater Standard is equipped with an RS-232 port, which receives messages from a computer based control system, providing more intelligent control of the Home Theater Standard. For more information, see ***RS-232 Port: Sending Commands and Interpreting Data,*** developer's reference shipped with the Home Theater Standard.

The Home Theater Standard may be outfitted with an optional PHAST Link connector instead of an RS-232 connector, for integrating the HTS within a PHAST system. Contact your authorized Krell dealer, distributor, or Krell for information about this connection option.

52 RC-5 In

The RC-5 input makes custom installation easy and secure by accepting baseband RC-5 input commands from hardwired remote controllers.

53 12 VDC Out and In

The 12 VDC output sends a 12 Volt power on/off signal to other Krell components via a 12 V trigger cable, as well as to other devices that incorporate 12 Volt power on/off trigger input. The Home Theater Standard has four programmable 12 Volt outputs: Out1, Out2, Out3, and Out4; one input is available.

Note

When the HTS is in the operational mode, the 12 VDC Out provides 12 V of DC output. When the HTS is in the stand-by mode or off, the DC output is 0 V.

Power

54 Back Panel Power Switch

Use this switch to change the Home Theater Standard from off to stand-by.

55 IEC Connector

The Home Theater Standard is equipped with a standard female IEC power connector, for use with the AC power cord.

Figure 3 The Home Theater Standard Remote Control

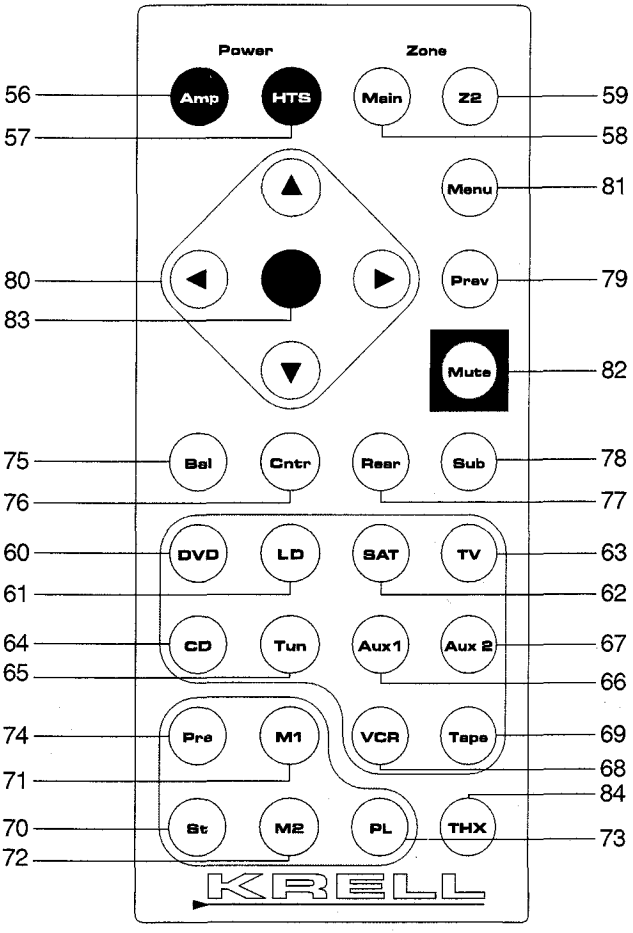
Power Functions
56 Amp Key
57 HTS Key

Zone Selection
58 Main Key
59 Z2 Key

Device Selection Keys
60 DVD Key
61 LD Key
62 SAT Key
63 TV Key
64 CD Key
65 Tuner Key
66 Aux1 Key
67 Aux2 Key
68 VCR Key
69 Tape Key

Processing Mode Keys
70 Stereo Key
71 M1 Key
72 M2 Key
73 Pro Logic Key
74 Preamp Key

Control Function Keys
75 Bal Key
76 Cntr Key
77 Rear Key
78 Sub Key
79 Prev Key
80 Level Keys
81 Menu Key
82 Mute Key
83 Enter Key
84 THX Key



Remote Control Description

See Figure 3 on page 17

The Home Theater Standard remote control provides on and off, input selection, processing mode selection, speaker volume and balance adjust, and mute functions, as well as access to the System Setup and Configuration menu.

To send operational instructions directly into the Home Theater Standard using an RS-232 based external control device, see ***RS-232 Port: Sending Commands and Interpreting Data,*** the developer's reference shipped with the Home Theater Standard.

BATTERY INSTALLATION AND REMOVAL

The HTS remote control uses one CR2025 lithium battery, which is included with the shipment.

To open the battery compartment on the back of the remote control:

1. Place the remote face down on the table.
2. Use your thumbnail or a small jeweler's or eyeglass screwdriver to move the small tab toward the center of the remote, while using your index fingernail or screwdriver to pull down gently on the slot to the right of the tab. The battery compartment will slide out.
3. Place the battery, plus side up, in the battery tray.
4. Slide battery compartment back into the remote until you hear a click.

The remote control is ready for operation.

Notes

Do not use a knife or other sharp objects to open the battery compartment; they will scratch the remote control finish.

Replace battery when remote control function becomes intermittent.

Remove battery if the remote control is not used for a long period of time. Battery leakage can damage the remote control.

Remote Control Description, continued

Home Theater Standard remote control keys and their functions are described below.

Power Functions

56 Amp Key

Use this key to power on/off a Krell remote control amplifier.

57 HTS Key

Use this key to switch the Home Theater Standard unit between the stand-by mode and the operational mode.

Note

When you power off while zone 2 is selected, only zone 2 turns off. Press the power button or the HTS key a second time to power off the main zone.

Zone Selection

58 Main Key

Use this key to select the main zone for a device.

59 Z2 Key

Use this key to select zone 2 for a device. See **Main Zone and Zone 2 Operation,** on page 54.

Note

The Home Theater Standard defaults to the main zone. To activate a device in zone 2, you must press the remote control Z2 key (59) before selecting a device.

Device Selection Keys

60 DVD Key

Use this key to select the digital videodisc device.

61 LD Key

Use this key to select the laser disc device.

62 SAT Key

Use this key to select the satellite feed device.

63 TV Key

Use this key to select the television device.

64 CD Key

Use this key to select the compact disc device.

65 Tuner Key

Use this key to select the AM/FM tuner device.

66 Aux1 Key

Use this key to select the auxiliary device, such as phono, tape, or an additional DVD, LD, CD, or VCR.

67 Aux2 Key

Use this key to select a second auxiliary device, such as phono, tape, or an additional DVD, LD, CD, or VCR.

68 VCR Key

Use this key to select the VCR device.

69 Tape Key

Use this key to select the output from an analog tape recorder connected to the tape inputs.

Note

Once a device is selected, press the device selection key again to change the tape output source bus to the zone currently selected. See **Tape Input and Output,** on page 53.

Processing Mode Keys

The Home Theater Standard automatically engages the appropriate decoding format, Dolby Digital or DTS, if one of these signals is present.

70 Stereo Key

Use this key to select the stereo decoding mode, which allows you to listen to a stereo recording (for example, a compact disc) in two-channel (left and right) mode.

Note

The stereo decoding mode operates only with an analog input or a digital PCM input (for example, a compact disc).

71 M1 Key

72 M2 Key

Use these keys to engage a Krell Music Surround mode, which allows you to listen to a stereo recording (for example, a compact disc) in a multi-channel mode. This mode can be programmed to create different simulated acoustic environments. The red LED illuminates when this circuitry is engaged. See ***Configure Music,*** on page 47.

Note

The Krell Music Surround decoding mode operates only with an analog input or a digital PCM input (for example, a compact disc).

73 Pro Logic Key

Use this key to engage Dolby Pro Logic circuitry for use with all Dolby Surround encoded material, including laser discs, videotapes, television broadcasts, and compact discs.

Note

This mode is selected automatically when Dolby Digital source material is encoded for Pro Logic. If you wish to turn off this mode, press the Pro Logic button.

74 Preamp Key

Use this key to send the signal from the analog input directly to the volume control, with no digital processing, using the analog stage of the preamp. This avoids possible digital signal degradation and can be used for components with a high quality signal such as the KPS 28c. See ***Configure Mode,*** on page 36, for information on assigning the analog input to one of the device buttons (DVD, LD, SAT, VCR, TV).

Control Function Keys

75 Bal Key

Press this key to convert the volume level controls to balance controls. See ***Balance Button*** *(25)*, on page 11.

Use the Center, Rear, and Sub keys to change taste trims (make temporary speaker output adjustments of +/- 10 dB). These temporary changes revert to 0 dB when a new device is selected, or the system is powered down. For more information on taste trims and master (programmable) trims, see **Configure Level Adjustment,** on page 39.

76 Cntr Key

Use this key to select the center speaker, then use the ↑ ↓ keys (80) to adjust volume.

77 Rear Key

Use this key to select the rear speaker, then use the ↑ ↓ keys (80) to adjust volume.

78 Sub Key

Use this key to select the subwoofer, then use the ↑ ↓ keys (80) to adjust volume.

79 Prev Key

Use this key to escape from a System Setup and Configuration on-screen menu to the previously displayed screen. You can also use this key to keep triggers on while switching devices. See ***Other Operation Features,*** on page 55.

80 Level Keys

Use these keys to adjust volume level, balance level, and to scroll through System Setup and Configuration menus.

Remote Control Description, continued

81 Menu Key

Use this key to access the System Setup and Configuration on-screen menus.

82 Mute Key

Use this key to mute the Home Theater Standard's output. VOLUME MUTE appears in the front panel display.

83 Enter Key

Use this key to select menu items or to display the current system conditions.

84 THX Key

This key is reserved for future use, for units equipped with THX processing.

Connecting the Home Theater Standard to Your System

This section provides information about connecting your Home Theater Standard to analog and digital sources, video sources, and amplifiers. The HTS is equipped with balanced and single-ended inputs, and a multi-channel (DB-25) connector.

Krell recommends using balanced interconnect cables. Balanced interconnect cables not only can minimize sonic loss but also are immune to induced noise, especially for installations using long cables. Balanced connections have 6 dB more gain than single-ended connections. When level matching is critical, keep this specification in mind. Krell recommends that you use balanced inputs for components that will use the preamp mode.

Follow these steps to connect the Home Theater Standard to your system.

FIRST: CONNECT ANALOG AND DIGITAL SOURCES

1. Make sure all power sources and components are off before connecting inputs and outputs.
2. Neatly arrange and organize wiring to and from the Home Theater Standard and all components. Separate AC wires from audio cables to prevent hum or other unwanted noise from being introduced into the system.
3. For analog input sources, connect the right and left outputs of your source components to the inputs on the Home Theater Standard. The Home Theater Standard is equipped with six sets of single-ended analog audio inputs (S-1 through S-5 and tape) via RCA connectors and one set of balanced analog audio inputs (B-1) via XLR connectors.
4. For digital audio sources, connect the digital audio output of your source components to the digital inputs on the Home Theater Standard. The Home Theater Standard is equipped with six coaxial digital inputs via RCA connectors and two digital EIAJ optical inputs via TosLink connectors.

Note

For source units that are equipped with both digital and analog outputs, the digital outputs should be connected for listening in the main zone; the analog outputs should be connected for listening in zone 2 and for recording from the main or zone 2.

NEXT: CONNECT VIDEO SOURCES

Note

*See **Read This First,** on page 5, for information on making the on-screen display visible on your video monitor.*

1. Connect the output of your video components to the appropriate video input of the Home Theater Standard.
2. Connect the video outputs of the Home Theater Standard to the inputs of video recorders or additional video monitors, if desired.

The component video signal uses three wires that convey luminance (Y), red minus luminance [R – Y] (Cr), and blue minus luminance [B – Y] (Cb) signals.

Use the component connection when the source device (DVD) and output device (TV) both feature component connections. See the user manuals included with these devices for more information.

The Home Theater Standard is also equipped with four S-video inputs and four composite video inputs. S-video cables transmit the color and luminance components of the video signal separately. The comb filter within the source unit performs this separation. If the source's comb filter is superior to the one within the video monitor, use the S-video connections. Otherwise, use composite video input.

The Home Theater Standard is equipped with two S-video outputs, two composite video outputs, and one set of component video outputs. One S-video output, one composite video output, and the component video output include on-screen display. For dubbing purposes, only the output labeled OSD displays on-screen information.

Note

S-video inputs can be seen only on S-video outputs. The same is true for composite and component video signals.

LAST: CONNECT AMPLIFIER(S)

Connect the outputs of the Home Theater Standard to the input(s) of your power amplifier(s).

The Home Theater Standard has balanced outputs with XLR connectors and single-ended outputs with RCA connectors. Both outputs are active at all times, allowing simultaneous connection to separate amplifiers. Only one of these output formats should be connected to a single amplifier. Use the DB-25 connector to connect to a DB-25–equipped amplifier.

System Setup and Configuration Overview

This page outlines the System Setup and Configuration Menus. These easy-to-follow, step-by-step menus let you set up your Home Theater Standard for optimum performance. Detailed instructions begin on page 26.

Krell recommends that you configure your component in the following order:

1. CONFIGURE SPEAKERS

Configure Speakers Setup lets you select speakers that are in your system and configure their bass range.

2. LISTENING ROOM SETUP

Listening Room Setup lets you to enter the exact location of each speaker in your system, so that the Home Theater Standard can calculate the proper arrival and delay settings.

3. CALIBRATE VOLUME

Calibrate Volume Setup lets you match the level of different speakers and amplifiers in your system.

4. CONFIGURE DEVICES

Configure Devices Setup lets you assign each device's inputs, modes, and triggers.

5. CONFIGURE LEVEL ADJUSTMENT

Configure Level Adjustment Setup lets you select mode, device, and analog input trims. These fixed positive or negative volume offsets let you maintain level matching while switching between inputs with significantly different volume levels.

6. OPERATION

The Operation Setup lets you choose the menu display's background color, the position and display time for on-screen display, and video display brightness. This menu also lets you choose your serial control, set up virtual acoustic environments, program another remote to accept Home Theater Standard commands, and set up dynamic range compression modes.

System Setup and Configuration

The remote control is the main input device for the Home Theater Standard. All initial setup and subsequent system configuration adjustments must be made through the remote control, or via the RS-232 port.

For maximum performance, the Home Theater Standard must be configured for each system device, its capabilities, and speaker positions in the listening room. Krell recommends configuring your system, step-by-step, in sequential order. Enter information into the Home Theater Standard through interactive on-screen menus. These menus are structured to guide you through the setup process for each device or for your entire surround sound system.

NAVIGATING THE MENU

To navigate the menu, use the remote control's directional, enter, and previous keys. The direction keys: ←, ↑, →, and ↓ (80) let you move around the menu screen and highlight the desired selection (indicated by a blinking cursor). The enter key (83) lets you select the highlighted item. The previous key (79) sends you to the previous screen. If at any time during the system configuration process you wish to exit the menu system, press the remote control menu key (81).

Note

Some options in the Home Theater Standard are designed specifically for digital and/or analog devices. To use the digital or analog options, you must connect the correct format device for the desired option.

It is easier to understand the numerous options available to you through the Home Theater Standard if you have a specific configuration example. The following sections illustrate setup and configuration by showing you how to select a DVD device, configure available options, and integrate the device into your system.

ACCESSING THE MAIN MENU

To begin configuring the system:

1. Connect the on-screen video output of the Home Theater Standard on the back panel to your video monitor. Set the video monitor to this input.

   See ***Read This First,*** on page 5, for information on making the on-screen display visible on your video monitor.

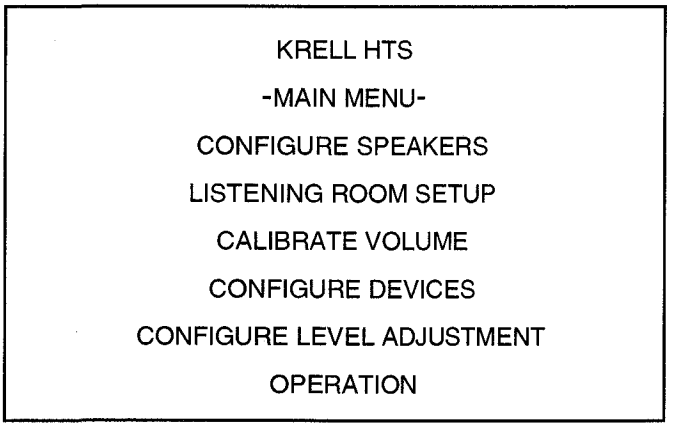
2. Connect the AC power cord to the IEC power connector (55) on the Home Theater Standard and to the AC wall receptacle.
3. Move the back panel power switch (54) into the up (on) position. The red power LED on the front panel illuminates. The words PLEASE WAIT, INITIALIZING. . . appear in the front panel display (23). When the initializing message disappears, the Home Theater Standard is ready to switch to operational mode.

4. Use either the front panel power button (1) or the remote control HTS key (57) to power on the Home Theater Standard. The blue power LED (2) on the front panel illuminates. The Home Theater Standard is now in operational mode and ready to be configured.

IMPORTANT

Make sure that any source devices are off when you configure the HTS. Signals from source devices can interfere with remote control operation.

5. Press the remote control menu key (81). The MAIN MENU screen appears:

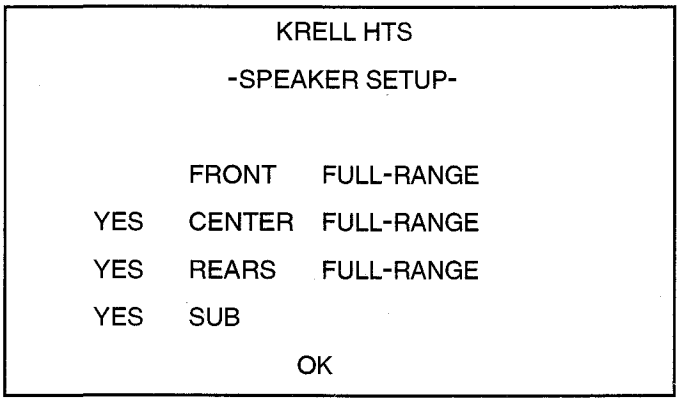


1. CONFIGURE SPEAKERS

The first menu option, configure speakers, allows you to engage or disable speakers in your system and select bass range based on your speakers' low frequency capabilities.

Speaker Setup

Use the ↓ key to highlight CONFIGURE SPEAKERS, then press the enter (83) key. The SPEAKER SETUP screen appears:



The FRONT, CENTER, REARS, and SUB indicate possible speaker locations. YES indicates speakers currently present in the system. FRONT speakers are always present.

Bass Range

The speaker setup screen also shows the bass ranges for the front, center, and rear speakers. Options available are not bass limited (FULL-RANGE) or bass limited (LIMITED). The option you select depends on the low frequency capabilities of each speaker in your system. See ***Modify Speaker Settings***, below.

Note

The speaker setup screen shows the default settings for each speaker. If your system corresponds to the default settings, select OK *at the bottom of the menu screen, then press enter (83). You return to the main menu and can proceed to the next system configuration,* listening room setup.

Modify Speaker Settings

If the default settings do not correspond to your speakers, you can modify the speaker settings, using the following steps:

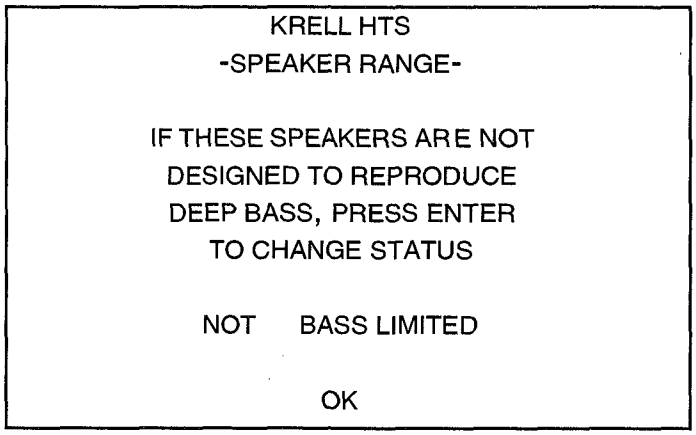
Enable/Disable a Speaker

Use the direction keys (80) to select the speaker you wish to enable. Press enter (83) to select YES.

Use the direction keys to select the speaker you wish to disable. Press enter (83) to select NO.

Select Bass Range

To change the settings for the front, center, or rear speakers, use the direction keys to highlight the speaker whose settings you wish to change and press enter (83). The SPEAKER RANGE screen appears:

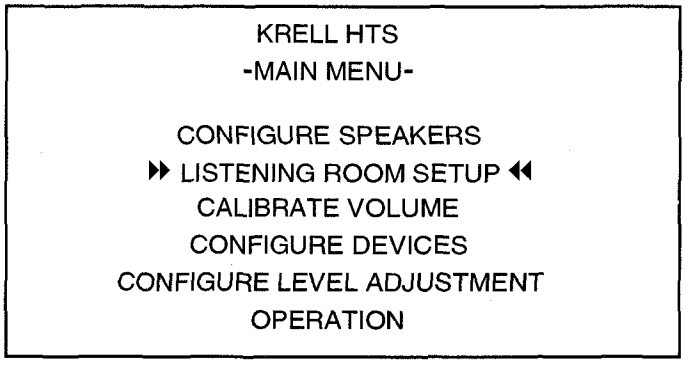


Select NOT if the selected speaker can reproduce low frequencies (deep bass). Select YES if the selected speaker cannot reproduce deep bass.

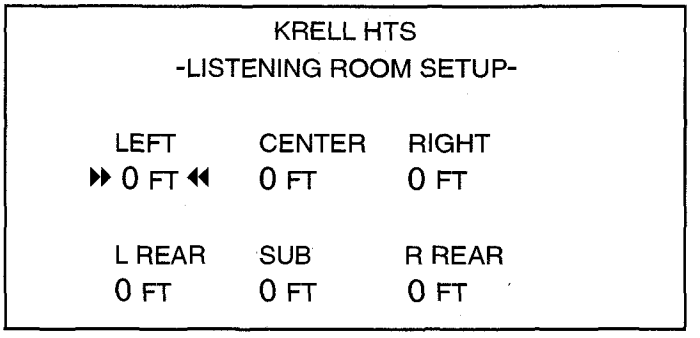
After selecting the appropriate option for your speakers, press enter (83), highlight OK, and press enter (83) again. You return to the speaker system setup menu. The on-screen phrase for the selected speaker now reads LIMITED or FULL-RANGE.

2. LISTENING ROOM SETUP

The second main menu screen, listening room setup, allows you to tell the Home Theater Standard the exact location of each speaker in your system, so that the Home Theater Standard can calculate the proper arrival and delay settings.



Use the ↑ ↓ keys (80) to highlight LISTENING ROOM SETUP and press enter (83). The LISTENING ROOM SETUP screen appears:



When you access the LISTENING ROOM SETUP screen, the cursor is blinking at the LEFT speaker. Press enter (83), then use the ↑ key (80) to increase the number to the correct distance (in feet, up to 30 feet) from the main listening position to the left speaker. Press enter (83) again to set the selection.

Use the → key (80) to highlight the 0 FT under CENTER. Press enter (83). Use the same procedure to input the correct distance for the center speaker. Press enter (83) again to set the selection.

Do the same for the remaining speakers in the system. After all the distances are set, press the previous key (79) to return to the main menu.

Note

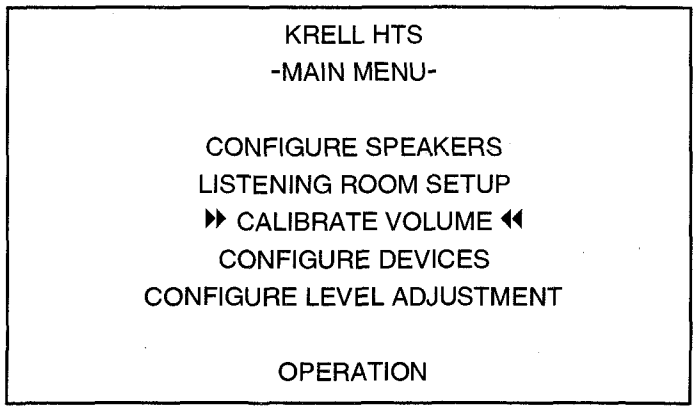
Any speaker not configured in the speaker system setup menu displays N/A (not available) for the distance specification.

3. CALIBRATE VOLUME

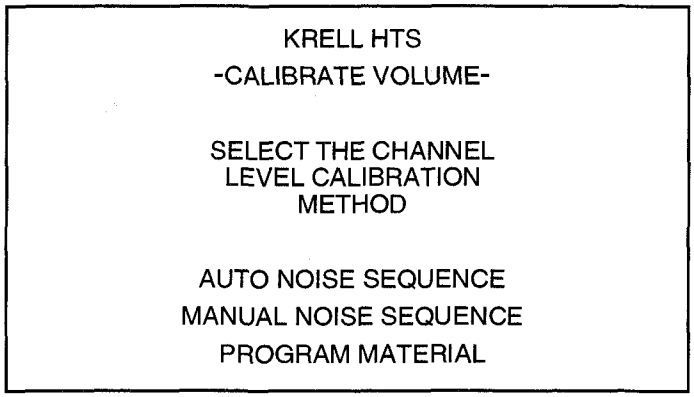
The third menu option, calibrate volume, allows you to calibrate each channel using the Home Theater Standard's internal noise generator.

Note

A sound pressure level (SPL) meter is required for this procedure.



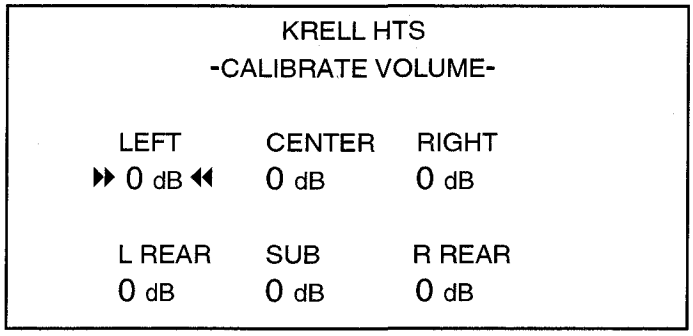
Use the ↑ ↓ keys (80) to highlight CALIBRATE VOLUME on the main menu and press enter (83). The CALIBRATE VOLUME screen appears:



The auto noise sequence scrolls through the different speaker channels automatically, allowing you to quickly calibrate channels. The manual noise sequence requires that you select each channel before calibrating.

Highlight your preferred choice and press enter (83). The message INITIALIZING... blinks while the Home Theater Standard loads its noise generator, or receives a signal from external program material.

The following screen appears:



Auto Noise Sequence

Set the SPL meter to C weighting and slow response. After initializing, the LEFT channel dB setting blinks, and you hear band-limited white noise through the left speaker. This noise continues for two seconds and then moves clockwise to the next speaker in the system.

Note

The adjustment must be made while the channel is blinking.

While the individual channel is blinking, use the ↑ ↓ keys (80), to adjust each speaker's setting until the SPL meter reads 75 dB.

Repeat this process for the remaining speakers. When all the speakers are set, press the previous key (79) twice to return to the main menu.

Manual Noise Sequence

Set the SPL meter to C weighting and slow response. After initializing, the LEFT channel dB setting is highlighted. Press enter (83). You hear white noise from the left speaker as the dB setting starts blinking. Use the ↑ ↓ keys (80) to adjust the setting until the SPL meter reads 75 dB.

Press enter (83) and use the → key (80) to highlight the CENTER channel dB setting. Use the ↑ ↓ keys (80) to adjust the setting, as above. Repeat this procedure for all remaining speakers.

When all the speakers are set, press the previous key (79) twice to return to the main menu.

Note

Any speaker not configured in the speaker setup menu displays N/A (not available) for the dB specification.

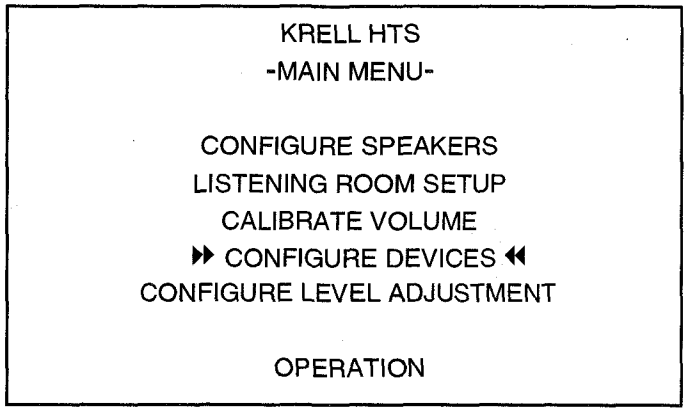
Program Material

The program material option uses the same screen as manual noise sequence, but with external material such as a test disc. The source plays, simultaneously, from all configured speakers. This allows you to individually adjust speaker balances based on your listening preferences rather than SPL readings.

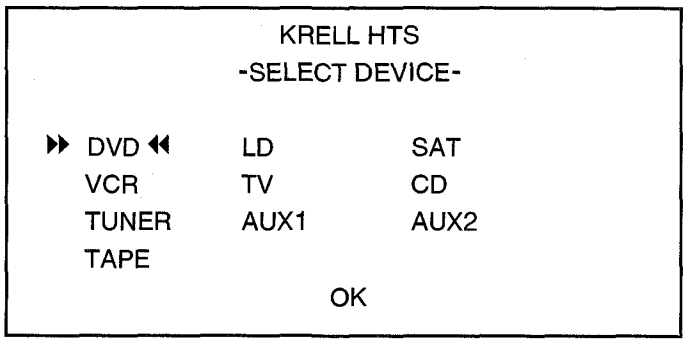
The program material option uses surround mode. If all channels are not present in the source material, they will not be heard during this process.

4. CONFIGURE DEVICES

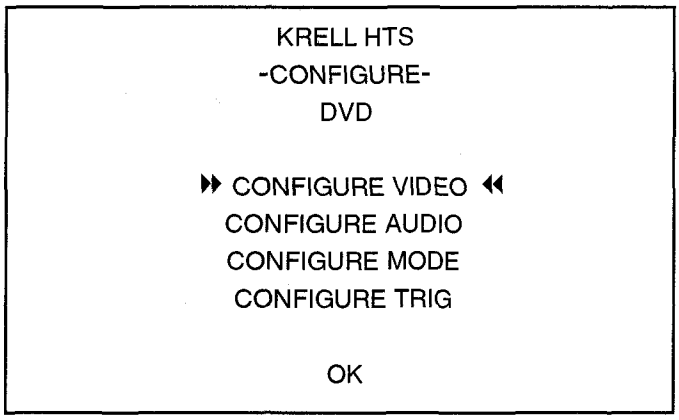
The fourth main menu option, configure devices, allows you to configure inputs, modes, and triggers for each device in the system. First, select a device that you want to configure. Next, assign a video input, video format, audio input(s), and default decoding mode for each connected device. You may also define 12 V trigger operation for each device.



Use the ↑ ↓ keys (80) to highlight CONFIGURE DEVICES on the main menu and press enter (83). The SELECT DEVICE screen appears:

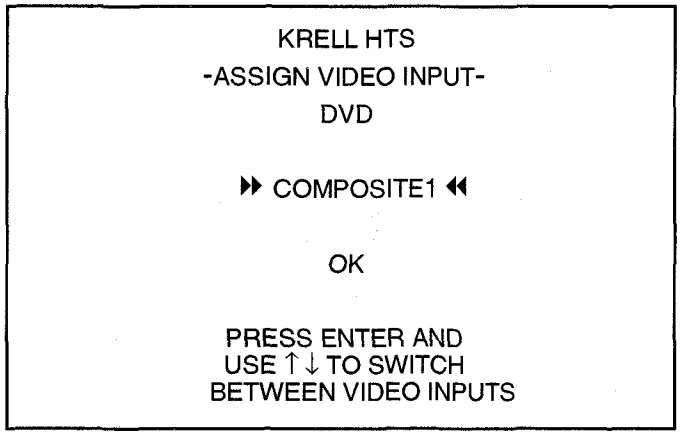


After selecting the device (the example used is DVD) that you want to configure, press enter (83). The CONFIGURE DVD screen appears:



Configure Video Input

Press enter (83) to select this option. The ASSIGN VIDEO INPUT screen appears:

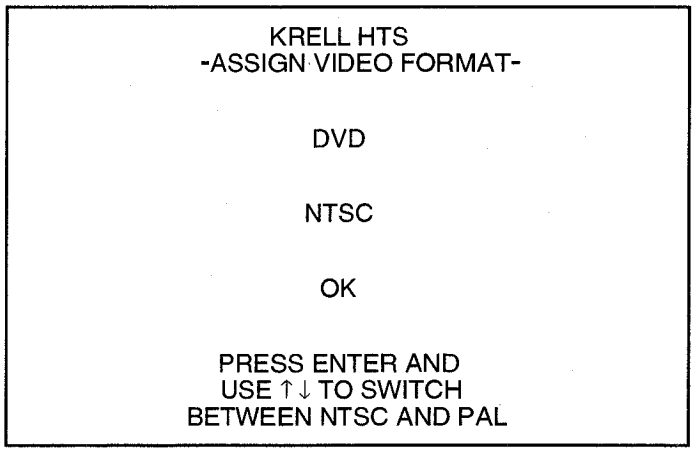


When you access this screen, you see the blinking cursor at COMPOSITE1. To select a video input option (COMPOSITE1, COMPOSITE2, COMPOSITE3, or COMPOSITE4; UNASSIGNED; S-VIDEO1, S-VIDEO2, S-VIDEO3, or S-VIDEO4; COMPONENT1 or COMPONENT2), follow directions at the bottom of the screen. Select the UNASSIGNED video input option if the selected device does not use a video input, for example, a CD player. Press enter (83) to confirm this setting. The ASSIGN VIDEO FORMAT screen appears.

Note

Unassigned does not turn off the video; the last video input used stays selected.

Assign Video Format



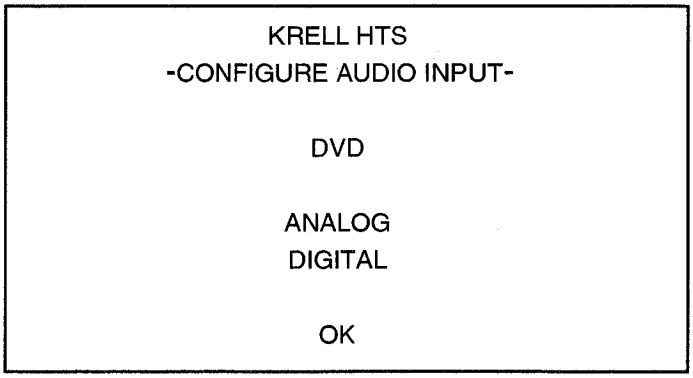
After selecting the appropriate video format, select OK and press enter (83) to return to the ASSIGN VIDEO INPUT screen. Select OK and press enter (83) to return to the CONFIGURE DEVICES screen.

Note

See your video device's operating manual. You must select the correct format for the video device to function properly with the Home Theater Standard.

Configure Audio

The next option on the CONFIGURE DEVICES menu is CONFIGURE AUDIO. Use the ↑ ↓ keys (80) to select CONFIGURE AUDIO and press enter (83). The CONFIGURE AUDIO INPUT screen appears:



Note

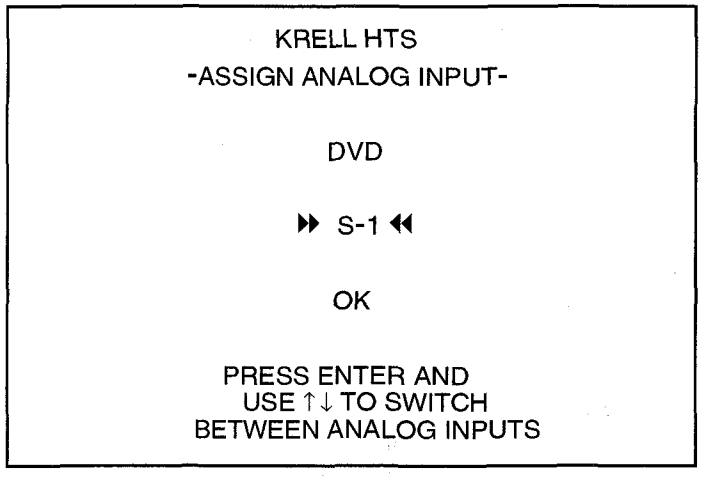
If the selected device has both digital and analog outputs, use the digital outputs for the main zone, and the analog outputs for zone 2.

To use an analog input only, set the digital input to UNASSIGNED.

If both analog and digital are unassigned, the last settings will stay selected when you switch to this device.

Assign Analog Input

If you select ANALOG, the ASSIGN ANALOG INPUT screen appears:

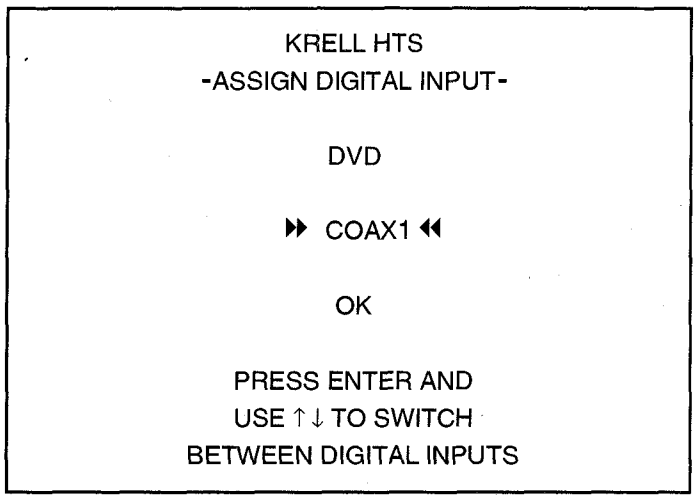


When this screen appears, you see the blinking cursor at S-1. To select another analog device option (S-1, S-2, S-3, S-4, S-5, TAPE, VCR1, UNASSIGNED, B-1), follow directions at the bottom of the screen. Select the UNASSIGNED analog input option if the selected device does not use an analog output, for example, a CD player. Press enter (83) to confirm this setting.

After you have selected the desired analog input, select OK and press enter (83). You return to the CONFIGURE AUDIO INPUT screen.

Assign Digital Input

If you select DIGITAL, the ASSIGN DIGITAL INPUT screen appears:



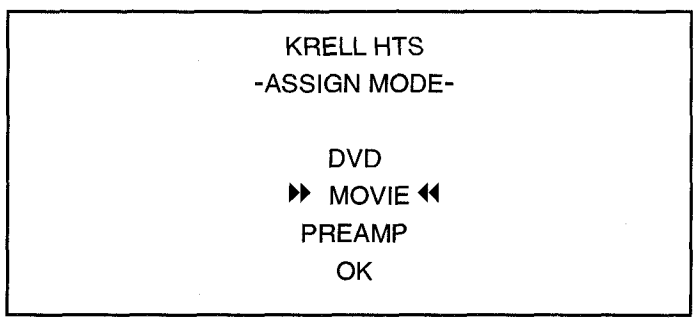
When you enter this screen, you see the blinking cursor at COAX1. To select another digital input option (COAX1, COAX2, COAX3, COAX4, COAX5, COAX6, OPT1, OPT2, UNASSIGNED), follow directions at the bottom of the screen. Select the UNASSIGNED digital input option if the selected device does not use a digital output, for example, an analog VCR. Press enter (83) to confirm this setting.

Select OK and press enter (83) to return to the CONFIGURE AUDIO INPUT screen.

Select OK and press enter (83) again, to return to the CONFIGURE DEVICES screen.

Configure Mode

The next option for the CONFIGURE DEVICES screen is configure mode. Select CONFIGURE MODE and press enter (83). The ASSIGN MODE screen appears.



Note

Digital input must be unassigned to use preamp mode.

When you enter this screen, you see the blinking cursor at MOVIE. Selecting MOVIE directs the Home Theater Standard to select Dolby Digital or DTS processing if one of these signals is present; otherwise Dolby Pro Logic is engaged. To assign another mode option (STEREO, MUSIC1, MUSIC2, UNASSIGNED, PREAMP), press enter (83), then use the ↑ ↓ keys (80) to select the desired mode. Press enter (83) to confirm the setting. Select OK and press enter (83) to return to the CONFIGURE DEVICES screen.

Note

Unassigned holds the last selected mode (if it is valid) or switches to a valid mode.

Configure Trigger

The final option on the CONFIGURE DEVICES screen is configure trigger. This option allows you to customize the operation of the four remote output 12 VDC (12 Volt trigger) connectors (53) on the back panel.

Select CONFIGURE TRIGGER and press enter (83).

The CONFIGURE 12 V TRIGGER screen appears:

KRELL HTS
-CONFIGURE 12 V TRIGGER-

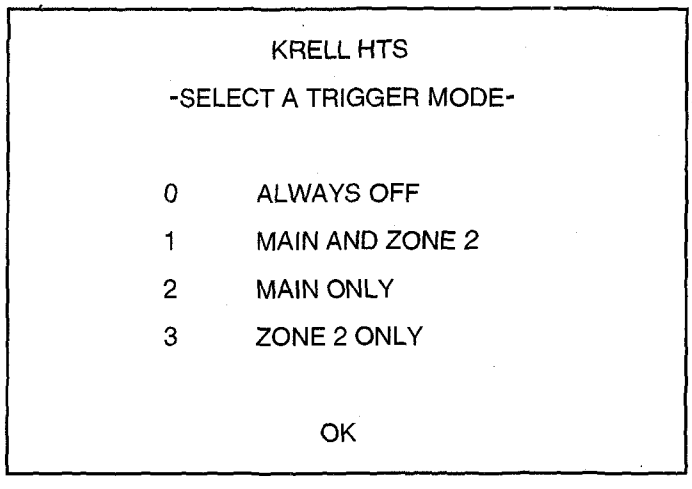
DVD

	▶▶ MODE ◀◀	DELAY
TRIGGER1	0	1 SEC.
TRIGGER2	0	1 SEC.
TRIGGER3	0	1 SEC.
TRIGGER4	0	1 SEC.

OK

Select Trigger Mode

Use the ↑ ↓ keys (80) to move the blinking cursor to the MODE for the desired trigger, and press enter (83). The SELECT A TRIGGER MODE screen appears:



Trigger Mode 0: This trigger is not activated when the configured device is selected.

Trigger Mode 1: The trigger activates when the configured device is selected for main or zone 2 listening.

Trigger Mode 2: The trigger activates only when the configured device is selected for main zone listening.

Trigger Mode 3: The trigger activates only when the device is selected for zone 2 listening.

Use the ↑ ↓ keys (80) to select the desired trigger mode and press enter (83) to select. You return to the CONFIGURE 12 V TRIGGER screen, which now reflects the change you just entered.

Note

If you press the prev button (79) on the remote before you switch devices, the triggers that are on remain on, even if they are specified as off on the newly selected device. This is for simulcast operation.

Adjust Trigger Delay

On the CONFIGURE 12 V TRIGGER screen, use the → key to move the blinking cursor to DELAY and press enter (83). Use the ↑ ↓ keys (80) to increase or decrease the number of seconds (range is from 0 to 30).

When desired trigger mode and trigger delays are set for all triggers, select OK in the CONFIGURE 12 V TRIGGER screen, and press enter (83) to return to the CONFIGURE DEVICES screen.

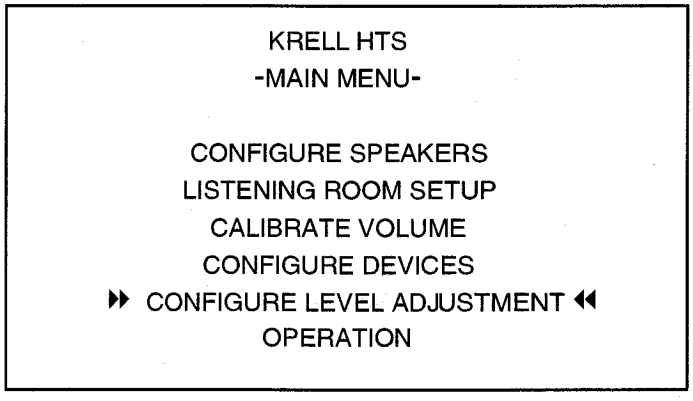
Configuring Additional Inputs

The screen process above uses DVD as the selected device. For any of the other devices available (LD, SAT, VCR1, TV, CD, TUNER, AUX1, AUX2, TAPE), use the same process.

When all devices have been selected and configured, select OK on the CONFIGURE DEVICES screen and press enter (83). You return to the SELECT DEVICE screen. Select OK and press enter (83) to return to the main menu.

5. CONFIGURE LEVEL ADJUSTMENT

The fifth main menu option, CONFIGURE LEVEL ADJUSTMENT, allows you to set trims. Trims add a fixed positive or negative volume offset for devices or modes with significantly different volume levels. After adjusting volume trim, you can easily switch between these inputs or modes without experiencing excessive changes in volume levels.

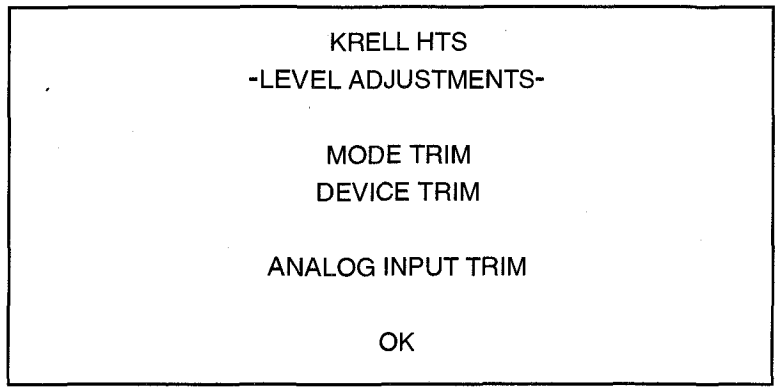


The Home Theater Standard uses two types of trims: master volume trims and taste trims. Master volume trims (mode, device, and analog input) change the volumes of all speakers at once, are programmed, and do not change unless reprogrammed through the menu. Taste trims adjust individual speakers using the individual channel and level buttons (30). Taste trims are not programmed and are temporary.

Note

The master volume control has a numerical range from 0 to 152, with 34 as the Dolby reference level. The center speaker, rear speakers, and subwoofer volume trim have a range of +/- 15 dB.

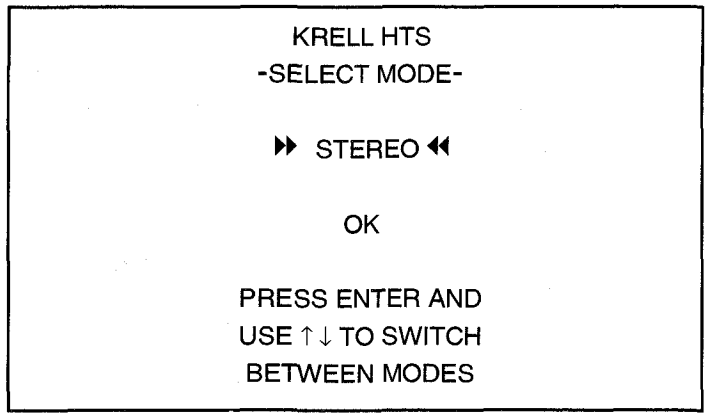
When you select CONFIGURE LEVEL ADJUSTMENT on the main menu, the LEVEL ADJUSTMENTS screen appears:



Select Mode Trim

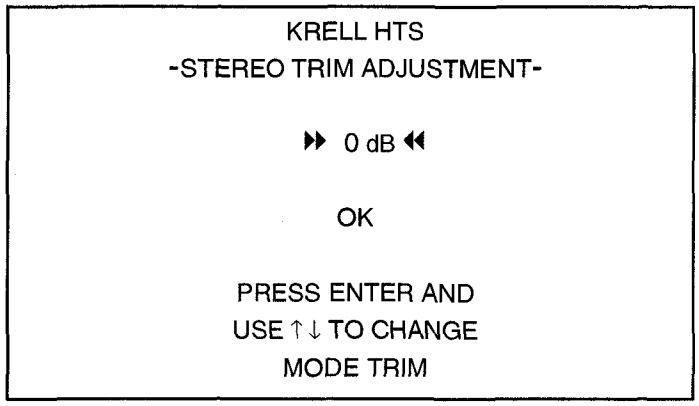
Mode trim increases or decreases the volume automatically when you change decoding modes (DOLBY DIGITAL, DTS, DOLBY PRO LOGIC, STEREO, MUSIC1, MUSIC2) to match listening levels between modes.

Select MODE TRIM and press enter (83). The SELECT MODE screen appears:



When you enter this screen, you see the blinking cursor at STEREO. To select another option (DOLBY DIGITAL, DTS, DOLBY PRO LOGIC, STEREO, MUSIC1, MUSIC2) press enter (83), then use ↑ ↓ keys (80) to scroll through the options.

Select the desired mode, and press enter (83). The TRIM ADJUSTMENT screen appears:



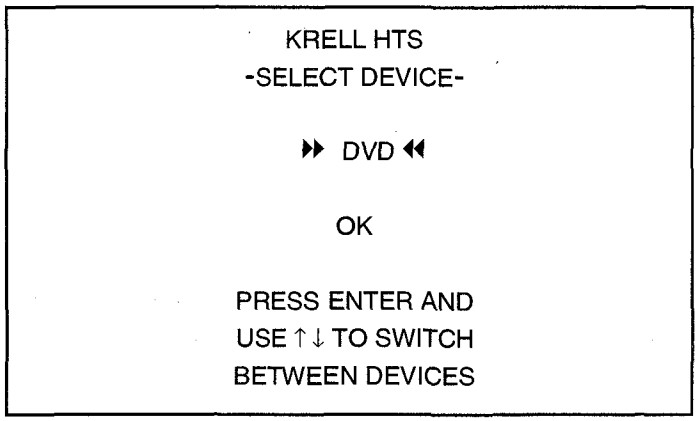
The blinking cursor is on the 0 dB. Press enter (83). Use ↑ ↓ keys (80) to select the appropriate trim adjustment (range is from –15 dB to +15 dB). Press enter (83) to set the selection.

Select OK and press enter (83) to return to the SELECT MODE screen. When all trims have been adjusted as desired, select OK on the SELECT MODE screen and press enter (83). You return to the LEVEL ADJUSTMENT screen.

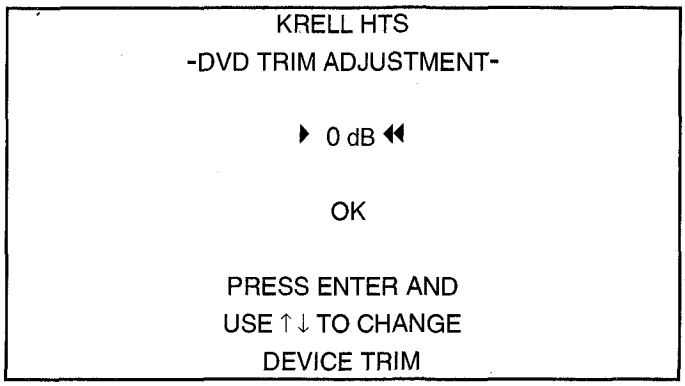
Select Device Trim

The device trim is a master volume trim that is activated when an input device is selected; it has a range of +/- 15 dB.

Select DEVICE TRIM and press enter (83). The SELECT DEVICE screen appears:



When you enter this screen, you see the blinking cursor at DVD. To select another option (LD, SAT, VCR, TV, CD, TUNER, AUX1, AUX2, TAPE), press enter (83), then use ↑ ↓ keys (80) to scroll through the options. Press enter (83). The DVD TRIM ADJUSTMENT screen appears:



The flashing cursor is on the 0 dB. Press enter (83), then use ↑ ↓ keys (80) to select the appropriate trim adjustment (range is from –15 dB to +15 dB). Press enter (83) to set the selection.

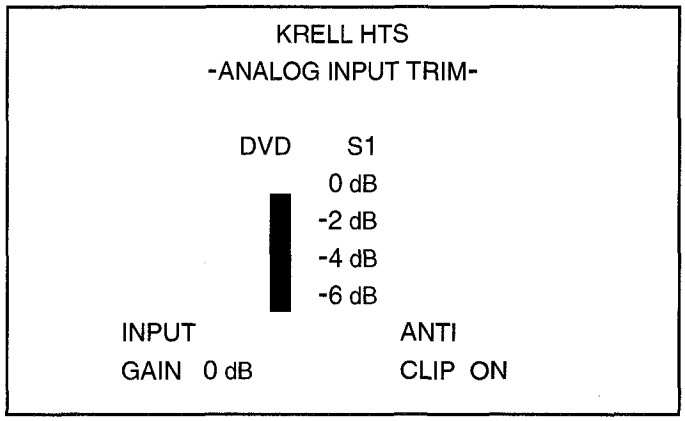
Select OK and press enter (83). You return to the SELECT DEVICE screen. Select OK and press enter (83). You return to the LEVEL ADJUSTMENTS screen.

Select Analog Input Trim

IMPORTANT

An analog device must be selected for this option to function.

The ANALOG INPUT TRIM screen is used to measure the level of an analog input source to the Home Theater Standard. When the ANALOG INPUT TRIM screen appears an upwardly pulsing graphic meter is displayed. This meter is an on-screen equivalent of a signal gain monitor.



Input Gain

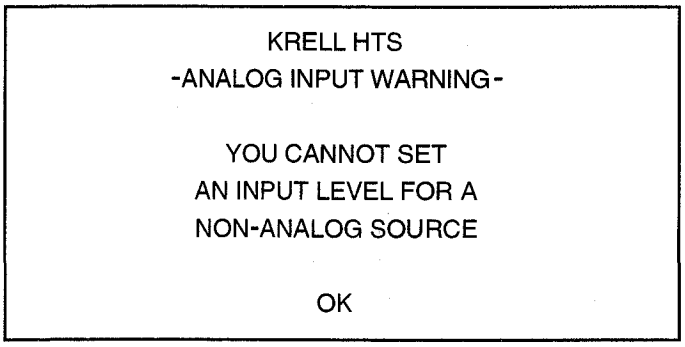
You can boost weaker signals by increasing the input gain value at the bottom left of this screen (in 3 dB, 6 dB, and 9 dB gain increments).

To maximize your system's signal to noise ratio for a particular input, the input gain value applied to the signal should be increased (if needed) to maintain a signal strength close to 0 dB gain. The optimal signal gain value is 0 dB.

Anti Clip

Setting anti clip to ON engages automatic distortion protection. Anti clip measures the signal level and prevents the input signal from distorting (clipping) the analog-to-digital converters. Set anti clip to OFF if you want to disengage distortion protection. This is particularly useful if you need to maintain maximum signal-to-noise thresholds when recording from a source.

If you select a non-analog source to configure, you see the following screen:

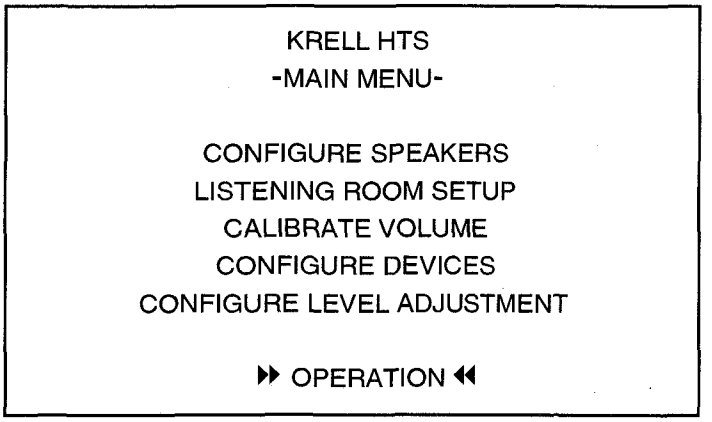


Select OK and press enter (83) to return to the level adjustment menu.

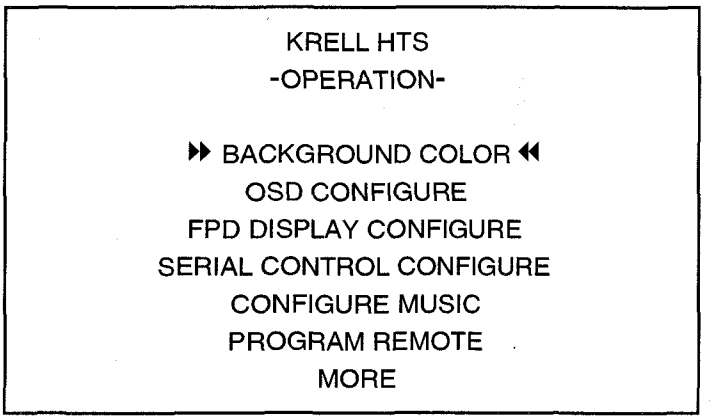
Select OK and press enter (83) again to return to the main menu.

6. OPERATION

The final option, OPERATION, allows you to choose background color for your video display, configure on-screen display and front panel display brightness, choose serial control format, select music modes, program a learning remote control to operate the Home Theater Standard, and program user button setup and DTS autoswitch.

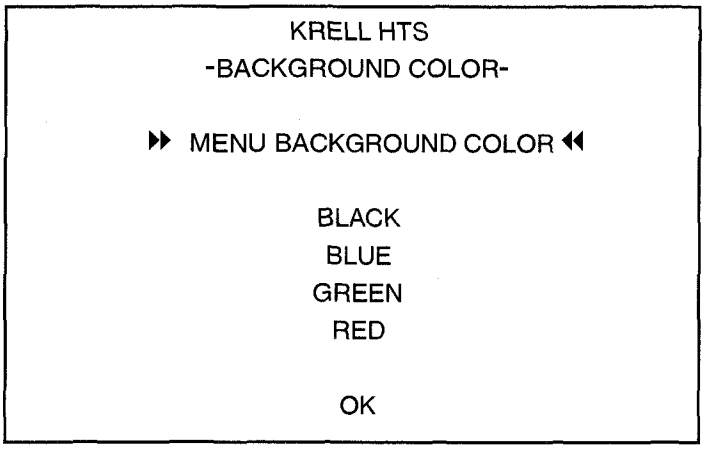


Use the ↑ ↓ keys (80) to select OPERATION and press enter (83). The OPERATION menu appears:



Background Color

To change the background color for your video menu display, select BACKGROUND COLOR and press enter (83). The MENU BACKGROUND COLOR screen appears:



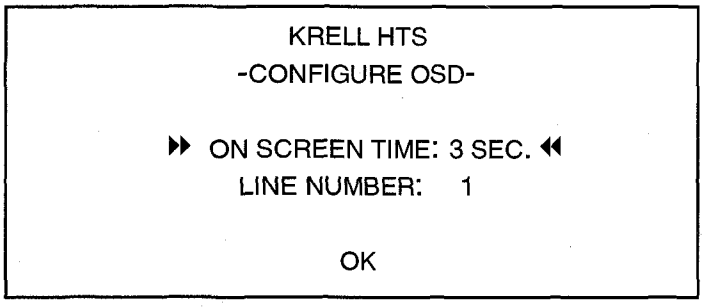
The blinking cursor appears at MENU BACKGROUND COLOR. Use the ↑ ↓ keys (80) to move the cursor to the desired color (black is the factory default). Press enter (83). The background menu color changes immediately. Select OK and press enter (83) to return to the operation menu.

Note

With component video, black is the available background color.

Configure On-Screen Display

The on-screen display feature allows you to choose the position and message display time for on-screen displays and messages. To configure the on-screen display, select OSD CONFIGURE and press enter (83). The CONFIGURE OSD screen appears:

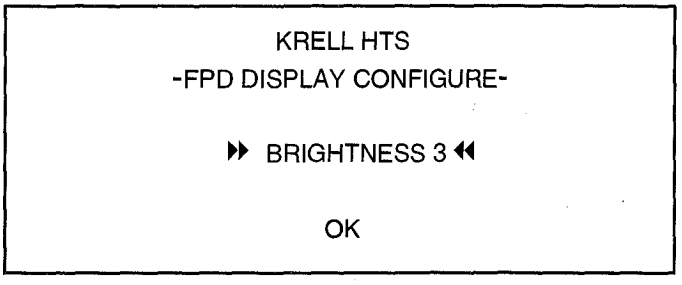


The blinking cursor appears at ON SCREEN TIME. To change the length of on-screen display, press enter (83), then use ↑ ↓ keys (80) to adjust the number of second (range is 0-5 seconds). Press enter (83) to set the selection.

To change the line number on which the display appears, use the ↑ ↓ keys (80) to move to LINE NUMBER. With the blinking cursor next to LINE NUMBER, press enter (83), then use ↑ ↓ keys (80) to select the screen line. The range is 0 (top line of screen) through 10 (bottom line of screen). A double arrow on the right side of the screen moves up and down, indicating line position. Press enter (83) to set the selection. Select OK and press enter (83) to return to the operation menu.

Configure FPD Display

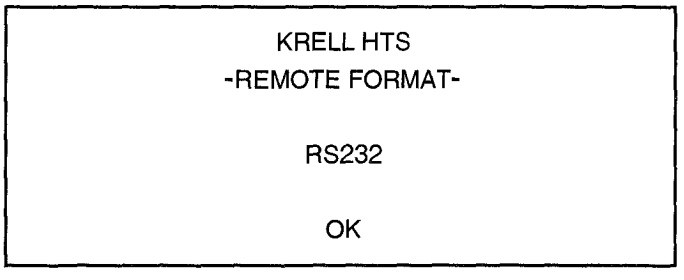
The front panel display (FPD) feature allows you to adjust the FPD display brightness. Select FPD DISPLAY CONFIGURE and press enter (83). The FPD DISPLAY CONFIGURE screen appears:



Press enter (83), then use ↑ ↓ keys (80) to select BRIGHTNESS. The range is 0 (off) to 3 (brightest, the factory default). Press enter (83) to set the selection. Select OK and press enter (83) to return to the operation menu.

Configure Serial Control

This screen allows you to choose between PHASTLink and RS-232 serial control sources. Select SERIAL CONTROL CONFIGURE and press enter (83). The REMOTE FORMAT screen appears:

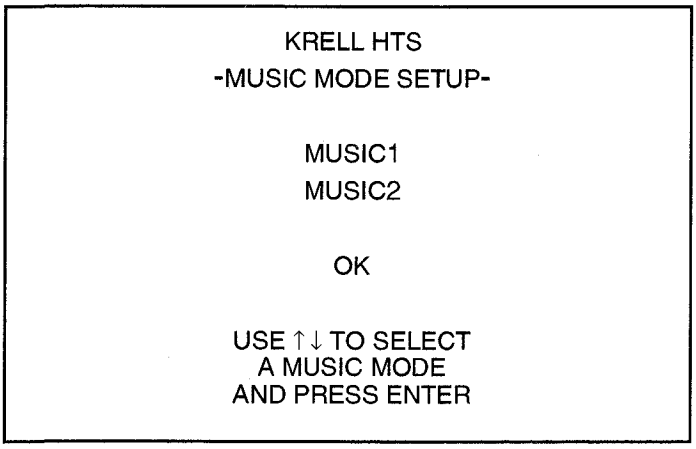


The flashing cursor appears at RS232. Press enter (83), and then use ↑ ↓ keys (80) to select RS232 or PHAST. Press enter (83) to set the selection. Select OK and press enter (83) to return to the operation menu.

For more information, see ***RS-232 Port: Sending Commands and Interpreting Data,*** developer's reference shipped with the Home Theater Standard.

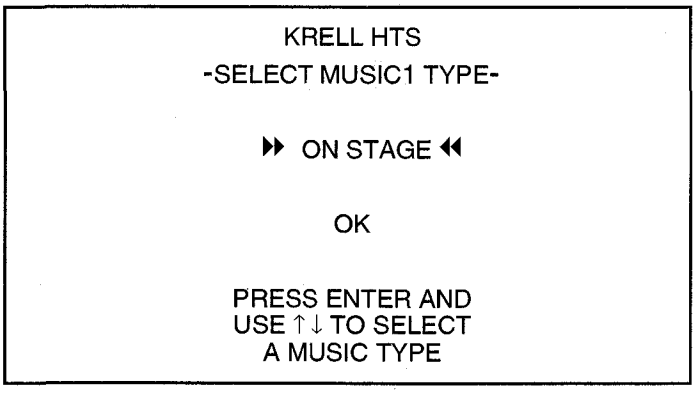
Configure Music

The next item in the OPERATION menu, CONFIGURE MUSIC, allows you to determine which music modes you want. Select CONFIGURE MUSIC and press enter (83). The MUSIC MODE SETUP screen appears:



Follow the on-screen directions, choosing MUSIC1 or MUSIC2.

You enter the select music type screen. When you enter this screen, you see a blinking cursor.



The ON STAGE option is the example used here. Each selected option activates a different virtual acoustic environment.

Select an option (ON STAGE, FRONT ROW, GENERAL ADMISSION, ORCHESTRA, MEZZANINE, FULL RANGE AND SUB, MONO, ENHANCED STEREO, or PARTY), by pressing enter (83), then use the ↑ ↓ keys (80) to scroll through the options. Press enter (83) to set the selection. Select OK and press enter (83). You return to the MUSIC MODE SETUP screen. Select MUSIC2 and repeat the process to choose a virtual environment.

Speakers active for each virtual environment are shown in the following table. If a speaker is not present in your system, the signal is redirected to the available speakers.

Virtual Acoustic Environments	
ON STAGE	L/R/C/S/RR
FRONT ROW	L/R/S/RR
GENERAL ADMISSION	L/R/S/RR
ORCHESTRA	L/R/C/S/RR
MEZZANINE	L/R/C/S/RR
FULL RANGE AND SUB	L/R/S
MONO	C/S
ENHANCED STEREO	L/R/C/S
PARTY	L/R/C/S/RR

L=Left Speaker **R**=Right Speaker **C**=Center Speaker

S=Sub Speaker **RR**=Rear Speaker(s)

After the desired options are selected, select OK and then enter (83) in the MUSIC MODE SETUP SCREEN to return to the operation menu.

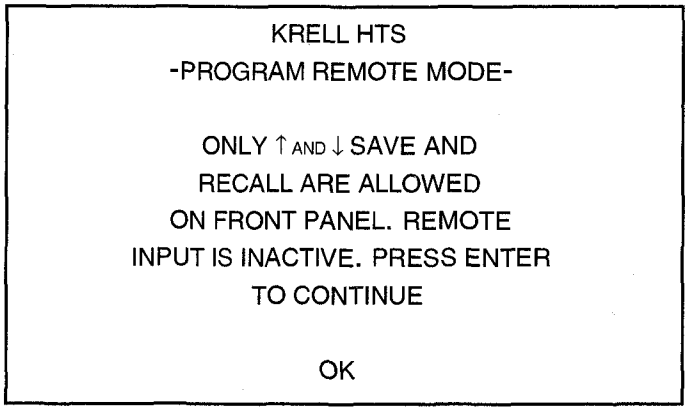
Program Remote

Program Remote allows you to program a learning remote control to operate the Home Theater Standard. Select PROGRAM REMOTE and press enter (83). The PROGRAM REMOTE screen appears:

KRELL HTS
-PROGRAM REMOTE-

USE FRONT PANEL ↑↓
TO SELECT A COMMAND
SAVE SENDS COMMAND
AND RECALL EXITS MODE
REMOTE INPUT IS INACTIVE

START



Note

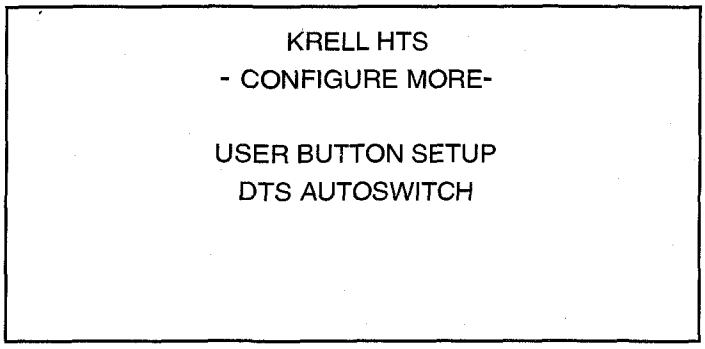
The infrared sensor on the front panel is rendered inactive until programming is complete.

1. Use the ↑ ↓ keys (80) to select START on the PROGRAM REMOTE screen and press enter (83).
2. Press the front panel level buttons (30) to select a command (commands appears on the front panel display).
3. Place the programmable remote in program mode (see learning remote user manual).
4. Place the infrared sensor of the programmable remote so that it faces the infrared emitter (17) on the Home Theater Standard front panel.
5. Press and hold the save button (29) on the Home Theater Standard front panel until the programmable remote has learned the code. (See your remote's user manual for information on time needed).
6. Repeat steps 2 through 5 for as many commands as desired.
7. Press the recall button (31) on the front panel to exit the program mode.

When all remote control programming is finished, press the menu key (81) to return to the main menu.

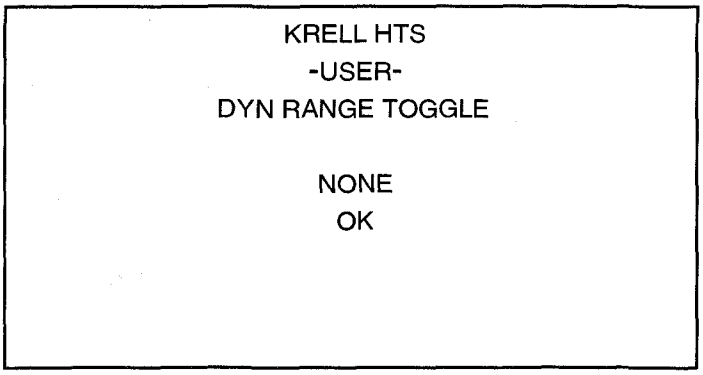
Configure More

Use this menu to select dynamic range compression modes with the user button or to change the DTS autoswitch setting.



User Button Setup

This function allows you to either deactivate the user button or select from three dynamic range compression modes using the programmable user button (24) on the front panel.



1. Use the ↑ ↓ keys (80) on the remote control to select MORE on the OPERATION menu screen, and press enter (83).
2. The CONFIGURE MORE screen appears. Press the ↑ ↓ keys (80) to select USER BUTTON SETUP. Select OK and press enter (83). The USER BUTTON SETUP screen appears.
3. Highlight DYN RANGE TOGGLE to enable the user button to adjust the dynamic range of the HTS or to deactivate the user button (none).
4. Press enter (83) to set the selection.
5. Press menu (81) to leave the menu mode.

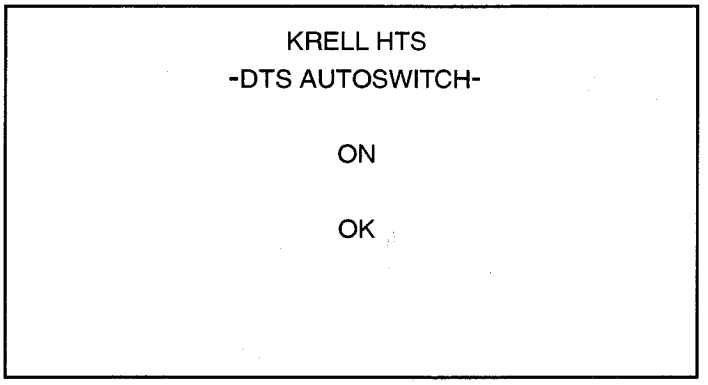
6. When the user button (24) is enabled to adjust the dynamic range of the HTS, you can press and release the user button on the front panel to scroll through the following dynamic range choices:

NORMAL	11 dB of compression
MAX	no compression
NIGHT	22 dB of compression

DTS Autoswitch

DTS AUTOSWITCH OFF keeps your Home Theater Standard operating in DTS mode, even if the bit stream is interrupted. Bit stream interruption—which can occur in some devices when you press and release fast forward, track back/forward, or scan buttons for a compact disc, digital videodisc, or laser disc—can cause potentially damaging bursts of noise.

This menu allows you to select whether the DTS autoswitch is turned on or off. Krell recommends that you leave the DTS autoswitch setting on (the default setting).



To change DTS autoswitch setting:

1. Use the ↑ ↓ keys (80) on the remote control to select MORE on the OPERATION menu screen, and press enter (83).
2. The MORE screen appears. Press the ↑ ↓ keys (80) to select DTS AUTOSWITCH.
3. Use the ↑ ↓ keys (80) to select DTS autoswitch OFF.
4. Select OK and press enter (83) to set the selection. Press the menu key (81) to exit.

Saving Setup, Recalling Setup, and Restoring Factory Default System Configuration Settings

SAVING SETUP SETTINGS

To save the settings that you have entered, press and hold the save button (29) for approximately four seconds. The front panel displays SAVING SETUP while the settings are being stored in the Home Theater Standard's nonvolatile memory.

RECALLING SETUP SETTINGS

To determine your system's current settings, press and hold the recall button (31) for approximately four seconds. The front panel displays RECALL SETUP while the settings are being retrieved from the Home Theater Standard's nonvolatile memory. Any settings that have been saved will be available through recalling system setup.

RESTORING FACTORY DEFAULT SYSTEM CONFIGURATION SETTINGS

To replace all system settings with the factory default settings, follow these steps:

1. Press the front panel power button (1) to put your system into stand-by mode.
2. Simultaneously press the recall button (31) and the power button (1). The front panel displays:

   PLEASE WAIT

   INITIALIZING

Your customized Home Theater Standard's settings are reset to their factory default settings.

Operating the Home Theater Standard

After the Home Theater Standard is connected to source devices and amplifiers, and system setup configured, the Home Theater Standard is ready for operation.

ON/OFF/STAND-BY

1. Insert the AC power cord into the IEC power connector (55) on the Home Theater Standard. Insert the other end into the AC wall receptacle.
2. Move the back panel power switch (54) into the up (on) position.
3. The red stand-by LED on the front panel illuminates. The words PLEASE WAIT, INITIALIZING appear in the front panel display (23). When the initializing message disappears, the Home Theater Standard is ready to be powered on.

   The front panel display shows volume, input information, and selected mode. After five seconds of inactivity, the display becomes blank.
4. Use either the front panel power button (1) or the remote control HTS key (57) to power on the Home Theater Standard. The blue power LED (2) on the front panel illuminates. The Home Theater Standard is now in the operational mode.
5. To return to stand-by, press the power button (1) or HTS key (57) again.

Note

Krell recommends that the back panel power switch remain up (on) at all times.

TAPE INPUT AND OUTPUT

The Home Theater Standard has a discrete tape input and output. The tape output is used to send an input signal from S-1, S-2, S-3, S-4, B-1, or an input signal from VCR1 to a recording device or processor. You can use the tape feature in three ways:

1. Use the tape input to playback pre-recorded tapes.
2. Use the tape input to compare the output signal of a three-head analog tape recorder to the output signal of an audio source. Press the tape button (14) or key (69) to switch between the tape recorder output (LED illuminated) and the input source (LED not illuminated).

   Press a device key a second time, after the device has been selected, to change the tape output source bus to the currently selected zone. Tape out can come from the main zone or zone 2.
3. Use the tape output to create a processor loop, when the Home Theater Standard is connected to a graphic equalizer or other ancillary equipment. Connect the equipment to the Home Theater Standard tape outputs (37) as described in the equipment manufacturer's manual. Press the tape button (14) or key (69) to switch between the processor output (LED illuminated) and the input source (LED not illuminated).

Notes

The tape output functions only with analog sources.

When changing sources, lower the volume to off or mute the output. This ensures that the next source played does not damage your system with a high output transient.

MAIN ZONE AND ZONE 2 OPERATION

The Home Theater Standard has two audio zones, main and zone 2. The main zone consists of the main viewing or listening area, and zone 2 consists of another listening area. You can select a digital or analog audio, or a video device for the main zone. Zone 2 can only be used with an analog audio device. To configure a device that has both digital and analog outputs, see ***Configure Devices,*** on page 32.

The Home Theater Standard's two-zone operation offers a number of listening options.

- You can play both zones simultaneously, with the main zone playing a device in one part of the house and zone 2 playing a different (or the same) device in another part of the house.
- With the Home Theater Standard in operational or stand-by mode, you can activate the main zone only. Or, while the Home Theater Standard is still in stand-by mode, you can set up zone 2 listening so that when you switch to operational mode, only zone 2 plays.
- You can play a device using the main zone while using zone 2 to record.

The red LED illuminates when the input is engaged and playing in the main zone. The green LED illuminates when the input is engaged and playing in zone 2.

Play Both Zones

With the Home Theater Standard in the stand-by mode:

1. Press and release the HTS key (57) until the blue power LED illuminates.
2. Press the input device selection button or key for the device you wish to play.
3. Begin playing the device.
4. Press the Z2 key (59).
5. Press the input device selection button or key for another device to play in zone 2. Or select the same input device button if you want the same device to play in both zones.
6. Begin playing the device.
7. Press the HTS key again to turn off zone 2.
8. Press the Z2 key and the HTS key again to turn off the main zone.

Play Either Zone

Main Zone

1. With the Home Theater Standard in the operational or stand-by mode, press the HTS key (57) to activate the main zone.
2. Select the device you wish to play.
3. Press HTS key again to turn off the main zone.

Zone 2

1. With the Home Theater Standard in the stand-by mode, press the Z2 key (59).
2. Select a device; it will play in zone 2 only.
3. Press the Z2 key again to turn off zone 2.

For additional remote control options, see ***RS-232 Port: Sending Commands and Interpreting Data,*** the developer's reference shipped with the Home Theater Standard.

Play in Main Zone and Record in Zone 2

1. Press the HTS key (57), then select the input device that you want to play through the main zone. The main zone LED illuminates. Begin playing the device.
2. To record at the same time, press the zone 2 key (59), then select the device that you want to record by pressing the input device selection key. After the zone 2 device LED illuminates, press the input device selection key again. The front panel display reads TAPE OUT CHANGED TO ZONE 2. Start playing the device that you wish to record. Recording begins when you start playing the device.
3. To monitor the output being recorded, switch back to the main zone, then press the input device selection key for the device being recorded. The material being recorded play through the main zone.
4. Press the input selected for main zone playback to return the main zone to playing its original material. The recording will continue uninterrupted through zone 2.

OTHER OPERATION FEATURES

When you are listening to or viewing different devices that have different trigger settings (configured through the setup menus), you can retain a trigger setting using the prev (79) key.

For example, you have configured your Home Theater Standard to turn on your TV monitor when trigger 4 is on and your CD player is set for trigger 4 off. You want to watch TV and listen to a CD at the same time. If you press the TV button or key followed by the CD button or key, the TV monitor will turn off.

To keep the monitor on and turn on the CD player, follow these steps:

1. Press the TV button (9) or key (63) to select the device. Begin playing the device.
2. Press the prev key (79).
3. Press the CD button (10) or key (64). Begin playing the device.

Warranty

This Krell product has a limited warranty of five years for parts and labor on circuitry. Should this product fail to perform at any time during the warranty, Krell will repair it at no cost to the owner, except as set forth in this warranty.

The warranty does not apply to damage caused by acts of God or nature.

The warranty on this page shall be in lieu of any other warranty, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. There are no warranties which exceed beyond those described in this document. If this product does not perform as warranted herein, the owner's sole remedy shall be repair. In no event will Krell be liable for incidental or consequential damages arising from purchase, use, or inability to use this product, even if Krell has been advised of the possibility of such damages.

Proof of purchase in the form of a bill of sale or receipted invoice substantiating that the unit is within the warranty period must be presented to obtain warranty service. The warranty begins on the date of the original retail purchase, as noted on the bill of sale or receipted invoice from an authorized Krell dealer or distributor. Previously owned equipment, when re-purchased from an authorized Krell dealer or distributor, has the balance of the original warranty, based on the original date of manufacture.

The warranty for Krell products is valid only in the country to which they were originally shipped, through the authorized Krell distributor for that country, and at the factory. There may be restrictions on or changes to Krell's warranty because of regulations within a specific country. Please check with your distributor for a complete understanding of the warranty in your country.

If a unit is serviced by a distributor who did not import the unit, there may be a charge for service, even if the product is within the warranty period.

Freight to the factory is your responsibility. Return freight within the United States (U.S.A.) is included in the warranty. If you purchased your Krell product outside the U.S.A. and wish to have it serviced at the factory, all freight and associated charges to the factory are your responsibility. Krell will pay return freight to the U.S.A.-based freight forwarder of your choice. Freight and other charges to ship the unit from the freight forwarder to you are also your responsibility.

Krell is not responsible for any damage incurred in transit. Krell will file claims for damages as necessary for units damaged in transit to the factory. You are responsible for filing claims for shipping damages during the return shipment.

Krell does not supply replacement parts and/or products to the owner of the unit. Replacement parts and/or products will be furnished only to the distributor performing service on this unit on an exchange basis only; any parts and/or products returned to Krell for exchange become the property of Krell.

No expressed or implied warranty is made for any Krell product damaged by accident, abuse, misuse, natural or personal disaster, or unauthorized modification.

Any unauthorized voltage conversion, disassembly, component replacement, perforation of chassis, updates, or modifications performed to the unit will void the warranty.

The operating voltage of this unit is determined by the factory and can only be changed by an authorized Krell distributor or at the factory. The voltage for this product in the U.S.A. cannot be changed until six months from the original purchase date.

In the event that Krell receives a product for warranty service that has been modified in any way without Krell authorization, all warranties on that product will be void. The product will be returned to original factory layout specifications at the owner's expense before it is repaired. All repairs required after the product has been returned to original factory specifications will be charged to the customer, at current parts and labor rates.

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

To register your product for warranty benefits, please complete and return the Warranty Registration Card enclosed in the shipping box within 15 days of purchase. Thank you.

Return Authorization Procedure

If you believe there is a problem with your component, please contact your dealer, distributor, or the Krell factory to discuss the problem before you return the component for repair. To expedite service, you may wish to complete and e-mail the Service Request Form in the Service Section of our website at:

http://www.krellonline.com

To contact the Krell Service Department

TEL	**203-799-9954** **Monday-Friday** **9:00 AM to 5:00 PM EST**
FAX	**203-799-9796**
E-MAIL	**service@krellonline.com**
WEBSITE	**www.krellonline.com**

Home Theater Standard

PRODUCT SERIAL NUMBER

To return this product to Krell, please follow this procedure so that we may serve you better:

1. Obtain a Return Authorization Number (R/A number) and shipping address from the Krell Service Department.
2. Insure and accept all liability for loss of or damage to this product during shipment to the Krell factory and prepay all shipping charges. Please see the Warranty page in this manual, concerning liability for shipping damage and shipping charges.

This product may also be hand delivered if arrangements with the Service Department have been made in advance. Proof of purchase will be required for warranty validation at the time of hand delivery.

IMPORTANT

Use the original packaging to ensure safe transit of this product to the dealer, distributor, or factory. Krell may, at its discretion, return this product in new packaging and bill the owner for such packaging if the product received by Krell was boxed in non-standard packaging or if the original packaging was so damaged that it was unusable. If Krell determines that new packaging is required, the owner will be notified before this product is returned.

To purchase additional packaging, please contact your authorized Krell dealer, distributor, or the Krell Service Department.

Specifications

SIGNAL TO NOISE RATIO		
"A" WEIGHTED	93 dB	
TOTAL HARMONIC DISTORTION (THD)		
UNWEIGHTED	20 Hz-20 kHz, -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 (one per channel) (one per channel)	6 balanced via XLR connectors 6 single-ended via RCA connectors 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	1 RS-232 1 PHAST Link (in and out) (optional) 1 RC-5 input 4 12 VDC OUT (12 V trigger) 1 12 VDC IN (12 V trigger)	
DECODING MODES	Dolby Pro Logic Dolby Digital DTS Digital Surround Sound	
SURROUND ENHANCEMENT MODES	9 Krell Music Surround Modes	
DIMENSIONS	17.25w x 5.65h x 16.45d in. 43.82w x 14.35h x 41.78d cm	
WEIGHT		
SHIPPING	25 lb.	11.3 kg
UNIT ONLY	19.25 lb.	8.75 kg

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

Krell Industries, Inc.
45 Connair Road
Orange, CT 06477-3650 USA

TEL 203-799-9954
FAX 203-891-2028
E-MAIL krell@krellonline.com
WEBSITE http://www.krellonline.com

Home Theater Standard

Surround Preamp/Processor

v 01.2