KRELL

The Leader in Audio Engineering

Audio + Video Standard Surround Preamp/Processor

Instructions for Use, v 98.3

Owner's Reference

Audio + Video Standard Surround Preamp/Processor

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ILLUSTRATIONS

P/N I960101900389

CE Marking

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

Introduction

Thank you for your purchase of the Krell® Audio + Video Standard. To obtain the best performance from your Audio + Video Standard surround preamp/processor, pay careful attention to its placement, installation, and operation. A thorough understanding of these details will help insure satisfactory operation and long life for the Audio + Video Standard and related system components.

THERE ARE NO USER-SERVICEABLE PARTS INSIDE ANY KRELL® PRODUCT.

Please contact your authorized dealer, distributor, or Krell®, if you have any questions not addressed in this reference manual.

Unpacking

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

   1 Audio + Video Standard
   1 AC power cord
   1 Audio + Video remote control
   4 AAA batteries
   1 T-10 Torx wrench
   1 packet containing an introductory letter from Dan D'Agostino, C.E.O., the Owner's Reference, and the Warranty Registration Card

Note
If any of these items are not included, please contact your authorized Krell® dealer or distributor immediately for assistance.

2. Carefully remove the unit and accessories from the box. Remove the protective plastic wrap from the unit.

Note
Save all packing materials. If you must ship your Audio + Video Standard in the future, repack the unit in its original packaging to prevent transit damage.

Placement

WARNING
The surround preamp/processor must not be located where it could be exposed to dripping or splashing fluids.

IMPORTANT
The ventilation grids and cooling fan on the top of the Audio + Video Standard need to be unobstructed at all times during operation. Do not place flammable material on top of or beneath the Audio + Video Standard. For installations inside cabinetry, make sure the Audio + Video Standard has adequate air circulation. Contact your dealer, distributor or Krell® for further information.

Before you install the Audio + Video Standard into your system, review the following guidelines to choose the optimum location for placement. This will help ensure a clean, trouble-free installation. *For the dimensions of the Audio + Video Standard, see* ***Specifications*** *on back cover.*

Place the Audio + Video Standard surround preamp/processor on a firm level surface away from dirt or moisture. A minimum spacing of three inches must exist between the Audio + Video Standard and surrounding components to ensure proper ventilation.

AC POWER GUIDELINES

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

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

Front Panel Description

See Figure 1 on page 8

1 Tape

A tape monitor allows you to compare the output from your analog tape recorder to the original source while making a recording. After selecting a source for recording (B1, S1-S5), press the tape button to toggle between the tape recorder output (LED illuminated) and the input source (LED not illuminated).

2 Analog In

The Analog In button activates the analog input and cycles through the six analog audio inputs. B1 is a balanced input via XLR connectors. S1-S5 are single-ended inputs via RCA connectors.

3 Digital In

The Digital In button activates the digital input and cycles through the six digital audio inputs (C1, C2, T1, T2, XLR, and RF). The main display will show RF IN when the RF input for Dolby Digital (AC-3) is selected.

C1 and C2 are coaxial inputs via RCA connectors.

T1 and T2 are TosLink™ inputs.

XLR is an AES/EBU connection.

RF is available via RCA or BNC connectors. There is no front panel LED for this digital input.

4 Main Display

The main display provides status messages for a variety of Audio + Video Standard operations.

5 Composite

The composite video input button cycles through the four composite video inputs.

6 S-Video

The S-video input button cycles through the four S-video inputs.

7 Volume Control Knob

The volume control knob adjusts the output level for the entire system as well as individual levels for the center speaker, side speakers, rear speakers, and subwoofers. The volume control knob normally adjusts the master volume as indicated by the LED illuminated above the master button (19). The change in volume is indicated in the main display and also on-screen. Adjustments to the center speaker, side speakers, rear speakers, and subwoofers are made by pressing the corresponding individual channel volume buttons (20) and rotating the volume control knob to the desired setting. The master volume control has a numerical range from 0 to 152 with 89 being the Dolby reference. The center speaker, side speakers, rear speakers, and subwoofer volume trim have a range of ±12 dB.

8 Power Button

The power button toggles the Audio + Video Standard from standby to operate and also switches the 12 VDC output between on and off.

9 Power LED

The power LED illuminates when the rear panel main power switch [see Figure 2 (38) on page 11] is placed in the on position. During remote control operation, the power LED will flash, indicating the Audio + Video Standard is receiving remote control commands.

10-16 Audio Mode Buttons
The five buttons (10, 13, 14, 15, and 16) select one of the Audio + Video Standard's audio modes.

The Audio + Video Standard automatically selects which digital decoding format to use, based on the input signal it receives.

When a silent digital signal is present, the Audio+Video Standard will automatically mute its output until program material resumes and the Audio+Video Standard identifies the correct processing mode. This occurs while changing laser, DVD or compact discs, and between tracks on a cd.

Mute protects your system by preventing the Audio + Video Standard from playing back digital data in an incorrect format. If the Audio + Video Standard is going to be used as a digital to analog converter for music playback, this muting may seem awkward because the beginning of each track may be affected. You can change the format autosensing to eliminate this muting, if you wish. To do so, switch the unit into standby. Press the DTS button (13) on the front panel and switch the Audio+Video Standard out of standby to power on (operate). This will disable the automatic muting feature of the Audio+Video Standard and will alter the way in which the automatic format sensing operates. For best results, select DTS prior to listening to any DTS encoded material and be careful to select the proper format for each piece of software played through the digital inputs.

To re-engage the automatic muting feature, switch the Audio+Video Standard into standby and toggle the main power switch (38) on the rear panel to the off position. When you restart your Audio + Video Standard, the automatic muting feature will be active. Be sure to turn all amplifiers off when switching the main power switch on and off.

10 Dolby Digital engages Dolby Digital (AC-3) processing for use with Dolby Digital (AC-3) encoded source material. The Audio + Video Standard automatically switches to Dolby Digital (AC-3) processing upon receiving a Dolby Digital (AC-3) encoded signal. No user intervention is required after the appropriate digital input is selected and connected.

Dolby Pro Logic engages Dolby Pro Logic circuitry for use with all Dolby surround processing encoded material. This includes laser discs, videotapes, television broadcasts, and compact discs.

11 The Dolby Digital LED is lit and the Dolby Pro Logic LED (12) is not lit when the Audio+ Video Standard is in the Dolby Digital (AC-3) decoding mode. When both the Dolby Digital LED and the Dolby Pro Logic LED are lit, the Audio + Video Standard is decoding a Dolby Digital (AC-3) encoded Dolby Pro Logic signal.

12 The Dolby Pro Logic LED is lit and the Dolby Digital LED (11) is not lit when the Audio+ Video Standard is in the Dolby Pro Logic decoding mode. When both the Dolby Digital LED and the Dolby Pro Logic LED are lit, the Audio + Video Standard is decoding a Dolby Digital (AC-3) encoded Dolby Pro Logic signal.

13 DTS engages DTS digital surround processing for use with DTS encoded source material. The Audio + Video Standard automatically switches to DTS processing upon receiving a DTS signal. No user intervention is required after the

appropriate digital input is selected and connected.

14 Music engages Krell Music Surround™ circuitry for use with stereo recordings.

15 Mono is for use with monophonic recordings. This provides monaural output from the center speaker and subwoofer(s) only. If the system does not include a center speaker, the monaural signal is split between the left and right speakers.

16 Preamp disengages all surround processing circuitry for use with stereo recordings. When fed an analog source, the Audio + Video Standard functions as a pure Class A, high resolution, analog preamplifier. For digital sources, the Audio + Video Standard employs 24-bit, custom Krell®-written, digital-to-analog conversion software before being sent to the analog preamplifier stage.

17 Recall Button

This button saves and recalls system configuration settings.

18 Infrared Sensor

The infrared sensor receives commands from the Audio + Video Standard remote control. For proper remote control operation, make sure the infrared sensor is clear of any obstructions.

19-21 Volume Control Buttons

The following six buttons select one of the Audio + Video Standard's volume channels:

19 Master Volume Button

When the LED above this button is illuminated, the volume control knob (7) affects the entire system equally. The volume adjustment is indicated in the main display and also on-screen.

20 Individual Channel Volume Trim

When the LED above any of these buttons is illuminated, the volume control knob (7) changes the level of the selected channel. These new changes will clear when a new input mode is selected. The volume control knob reverts back to controlling the default level, Master, after four seconds of inactivity.

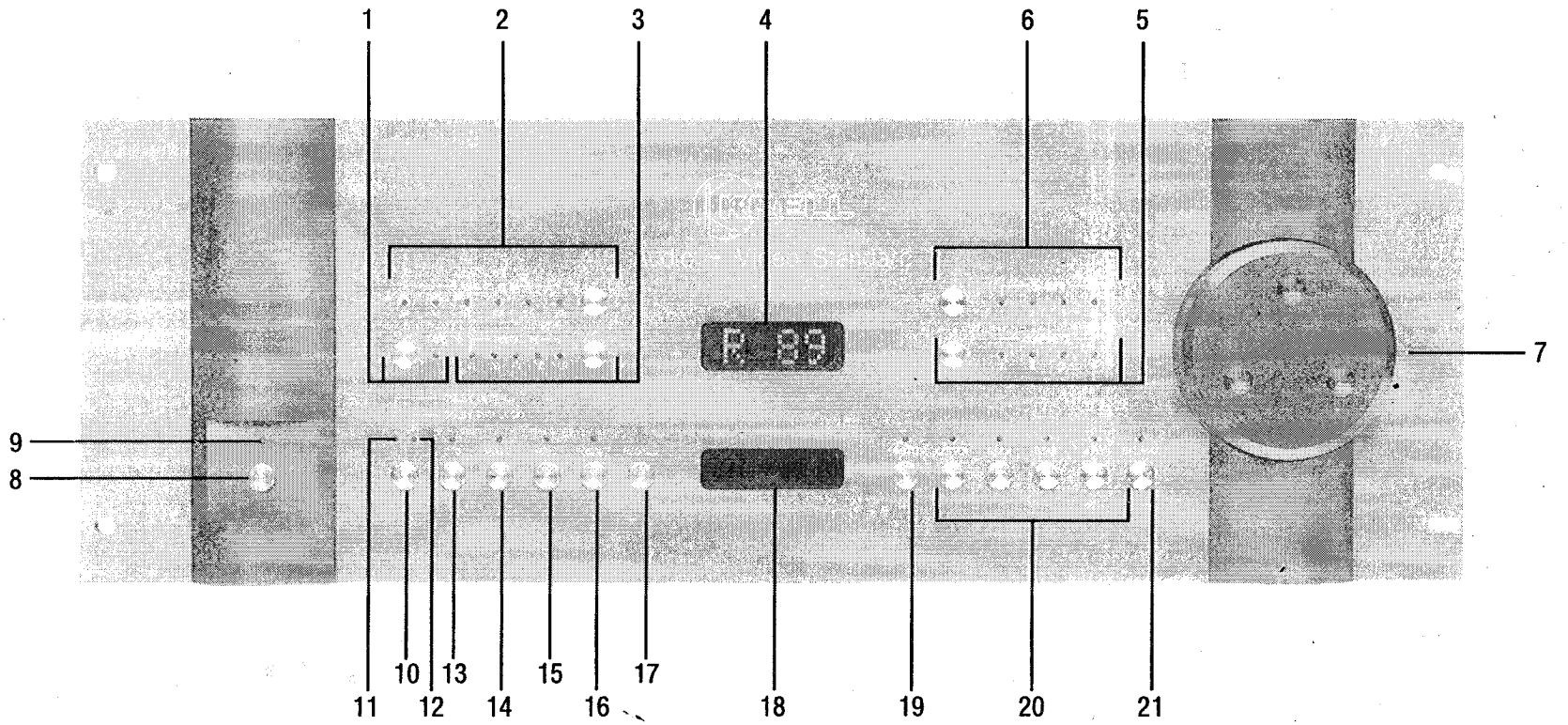
21 Balance Button (Preamp mode only)

When the LED above this button is illuminated, the volume control knob (7) affects the left-to-right balance of the system. The center position is indicated by CNTR in the main display. Balance may be adjusted in 1 dB increments up to 9 dB. The next adjustment mutes either channel, indicated by ROFF or LOFF for the right channel and left channel respectively. The on-screen representation for balance is graphical:

L . . . . . : . . . . . R

The center position is indicated by two vertical dots. Each dB of adjustment is represented by one individual dot. Moving the cursor so that it covers the L indicates a completely muted right channel. Conversely, positioning the cursor so that it covers the R indicates a completely muted left channel. The volume control knob (7) reverts back to controlling the default level, Master, after four seconds of inactivity.

FIGURE 1 AUDIO + VIDEO STANDARD FRONT PANEL



1 Tape
2 Analog In
3 Digital In
4 Main Display
5 Composite
6 S-Video
7 Volume Control Knob
8 Power Button
9 Power LED
10 Dolby Audio Mode Button
11 Dolby Digital (AC-3) Audio Mode LED
12 Dolby Pro Logic Audio Mode LED
13 DTS Audio Mode Button
14 Music Audio Mode Button
15 Mono Audio Mode Button
16 Preamp Audio Mode Button
17 Recall Button
18 Infrared Sensor
19 Master Volume Button
20 Individual Channel Volume Buttons
21 Balance Button

Back Panel Description

See Figure 2 on page 11

22 Balanced Channel Outputs
The Audio + Video Standard is equipped with nine channel outputs. All nine channels are equipped with balanced outputs via XLR connectors as well as single-ended connectors (30). The nine channel outputs are for the center, left, right, left and right side, left and right rear, and two subwoofer outputs (labeled Sub1, Sub2).

The XLR pin configurations are as follows:

Pin 1: Shield (ground)
Pin 2: Non-inverting (0°)
Pin 3: Inverting (180°)

23 Analog Tape Input
The Audio + Video Standard is equipped with one single-ended tape input.

24 Balanced Analog Inputs
The Audio + Video Standard is equipped with one balanced input (labeled B1) via XLR connectors.

The XLR pin configurations are as follows:

Pin 1: Shield (ground)
Pin 2: Non-inverting (0°)
Pin 3: Inverting (180°)

25 Single-Ended Analog Inputs
The Audio + Video Standard is equipped with five single-ended inputs (labeled S1-S5) via RCA connectors.

26 RF Inputs
The Audio + Video Standard is equipped with an RF input for use with the Dolby Digital (AC-3) RF output of a laser disc player. Connections are via RCA or BNC coaxial digital cable.

27 S-Video Inputs
The Audio + Video Standard is equipped with four S-video inputs (labeled 1-4).

28 S-Video Outputs
The Audio + Video Standard is equipped with three S-video outputs. The main S-video output (labeled on screen) includes on-screen graphics. For dubbing purposes, the second and third S-video outputs do not include on-screen graphics.

29 Infrared Remote Sensors
The Audio + Video Standard is equipped with an additional infrared sensor and a male baseband RC-5 remote input for custom installations.

30 Single-Ended Channel Outputs
The Audio + Video Standard is equipped with nine channel outputs. All nine channels are equipped with single-ended outputs via RCA connectors as well as balanced connectors (22). The nine channel outputs are for the center, left, right, left and right side, left and right rear, and two subwoofer outputs (labeled Sub1, Sub2).

31 Digital Audio Outputs
The Audio + Video Standard is equipped with two digital audio outputs in the following formats:

One coaxial via RCA connector
One TosLink™

32 Tape Outputs
The Audio + Video Standard is equipped with three analog tape outputs. Two are for use with video sources (labeled VCR1, VCR2), and the third is for use with an audio tape deck (labeled tape).

33 Digital Audio Inputs
The Audio + Video Standard is equipped with five digital audio inputs in the following formats:

Two coaxial via RCA connectors
Two TosLink™
One AES/EBU via an XLR connector

34 Composite Video Inputs
The Audio + Video Standard is equipped with four RCA composite video inputs (labeled 1-4).

35 Composite Video Outputs
The Audio + Video Standard is equipped with three RCA composite video outputs. The main composite video output (labeled on screen) includes on-screen graphics. For dubbing purposes, the second and third composite video outputs do not include on-screen graphics.

36 Composite Video (BNC) Input/Output
The Audio + Video Standard includes one composite video input and one composite video output via BNC connectors. These ports are electrically identical to the RCA composite video inputs (34) and outputs (35).

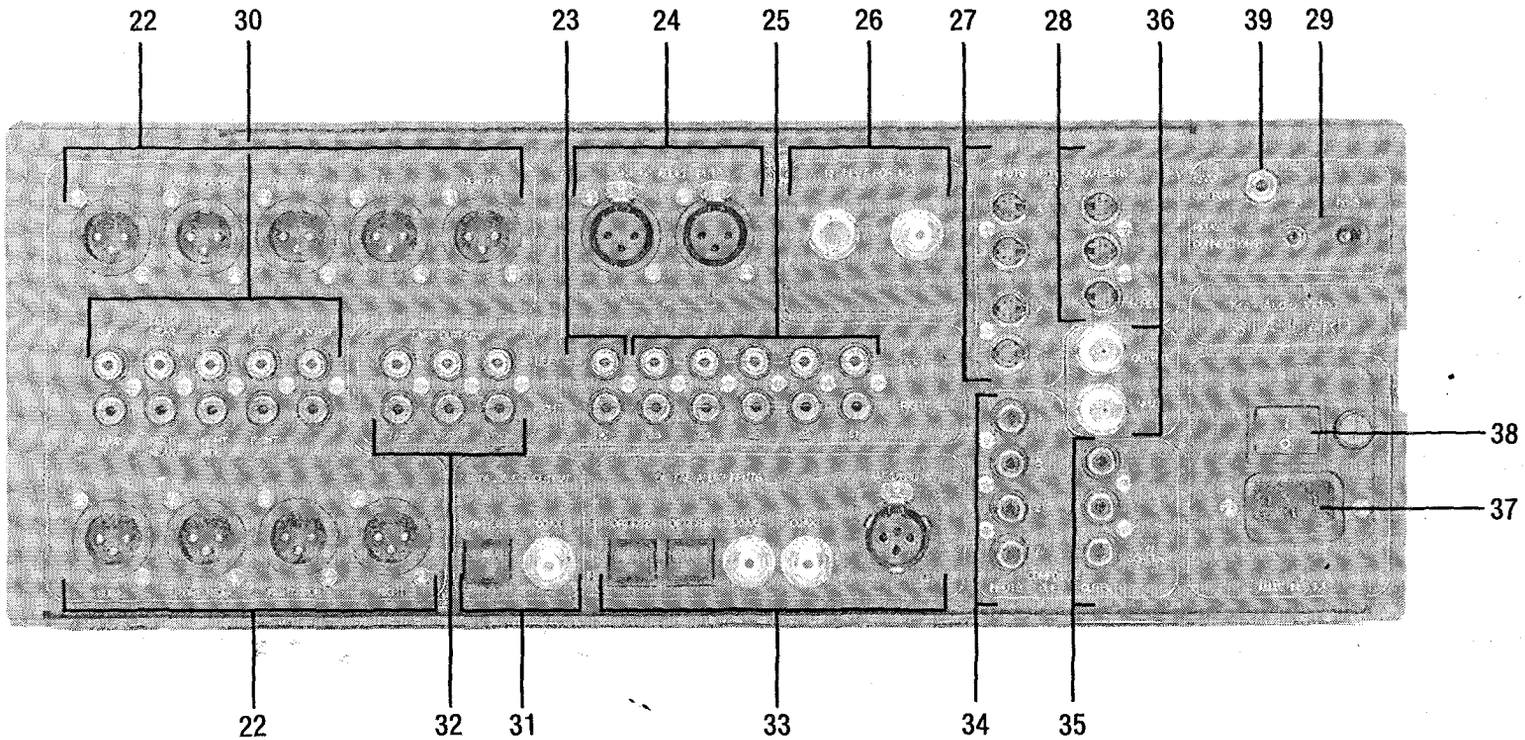
Note
You may simultaneously use both RCA and BNC outputs, but only one of the inputs.

37 IEC Power Connector
The Audio + Video Standard is equipped with a standard female IEC power connector.

38 Main Power Switch
Toggles the Audio + Video Standard between off and standby.

39 12 VDC Output
Activated by the front panel power button (8), the 12 VDC output sends a 12-volt power on/off signal to other Krell® components, as well as to other devices that incorporate a 12-volt power on/off trigger input. This allows for remote turning on/off of other components when the Audio + Video Standard is powered on.

FIGURE 2 AUDIO + VIDEO STANDARD BACK PANEL



22 Balanced Channel Outputs
23 Analog Tape Input
24 Balanced Analog Inputs
25 Single-Ended Analog Inputs
26 Dolby Digital Inputs
27 S-Video Inputs
28 S-Video Outputs
29 Infrared Remote Sensors
30 Single-Ended Channel Outputs
31 Digital Audio Outputs
32 Tape Outputs
33 Digital Audio Inputs
34 Composite Video Inputs
35 Composite Video Outputs
36 Composite Video (BNC) Input/Output
37 IEC Power Connector
38 Main Power Switch
39 12 VDC Output

Connecting the Audio + Video Standard to Your System

WARNING
When making connections to this component or any other, make sure the power amplifier is off and the preamplifier is in the mute or stand-by mode. Make sure all cable terminations are of the highest quality, free from frayed ends, shorts, or cold solder joints.

1. For analog audio sources, connect the left and right outputs of your source components to the inputs on the Audio + Video Standard. The Audio + Video Standard is equipped with six single-ended analog audio inputs (S1-S5 and tape) via RCA connectors and one balanced analog audio input (B1) via an XLR connector.

2. For digital audio sources, connect the digital audio output of your source components to the digital inputs on the Audio + Video Standard. The Audio + Video Standard is equipped with five digital inputs: two coaxial inputs via RCA connectors, two TosLink™ optical connections, and one AES/EBU via an XLR connector. For Dolby Digital (AC-3) surround processing, connect the RF output of a laser disc player to one of the RF inputs.

Note
For source units that are equipped with both digital and analog audio outputs, higher performance will generally result when connecting source units to the Audio + Video Standard using a digital audio output.

3. Connect the video outputs of your video sources to the video inputs on the Audio + Video Standard.

The Audio + Video Standard is 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. This separation is performed by the comb filter within the source unit. If the source unit's comb filter is superior to the one within the video monitor, S-video connections should be used. Otherwise, a composite video connection should be used.

Notes
S-video cables should not be used for lengths greater than 20 feet, for optimum performance.

The Audio + Video Standard does not convert video signal formats, i.e., an S-video input signal is output as an S-video signal. The same condition holds true for a composite video signal.

The Audio + Video Standard is equipped with three S-video outputs and three composite video outputs. The main S-video output (28) and composite video output (35) include on-screen graphics. The composite video 1 output also has a parallel BNC connector. For dubbing purposes, the second and third video outputs do not include on-screen graphics. These outputs may be connected to the video inputs of your video recorders or to additional video monitors.

4. Connect the outputs of the Audio + Video Standard to the input(s) of your power amplifier(s).

4. Connect the outputs of the Audio + Video Standard to the input(s) of your power amplifier(s).

The Audio + Video Standard has balanced outputs via XLR connectors and single-ended outputs via 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.

Note
When connecting inputs or outputs to the Audio + Video Standard, remember that the balanced connections will have 6 dB more gain than the single-ended connections. If level matching becomes difficult in your installation, keep this specification in mind.

5. Plug the AC cord into the receptacle on the back of the Audio + Video Standard. Plug the remaining end into the AC wall receptacle. Toggle the main power switch (38) to the up position. The red power LED (9) will illuminate, and the main display (4) will show AC-3 for three seconds. The Audio + Video Standard is now ready for operation.

6. Press either the front panel power button (8) or the remote control power button [see Figure 3 (44) on page 15]. The word WAIT will appear in the main display and the initializing message will appear on-screen. *To configure the Audio + Video Standard for operation, see* ***System Configuration*** *on page 18.*

Remote Control Description

See Figure 3 on page 16

40 Analog Audio Input Buttons
These buttons select the analog audio source. B1 is a balanced input via XLR connectors while S1-S5 are single ended inputs via RCA connectors. The tape button allows access to an analog tape recorder.

41 Digital Audio Input Buttons
These buttons select the digital audio source. C1 and C2 are coaxial inputs via RCA connectors, T1 and T2 are TosLink™ inputs, XLR is an AES/EBU connection, and RF is available via RCA or BNC connectors.

42 Processing Mode Buttons
The following six buttons select one of the Audio + Video Standard's processing modes. FCN, the function button, is reserved for future use.

The Audio + Video Standard automatically selects which digital decoding format to use, based on the input signal it receives.

When a silent digital signal is present, the Audio + Video Standard will automatically mute its output until program material resumes and the Audio + Video Standard identifies the correct processing mode. This occurs while changing laser, DVD or compact discs, and between tracks on a cd.

Mute protects your system by preventing the Audio + Video Standard from playing back digital data in an incorrect format. If the Audio + Video Standard is going to be used as a digital to analog converter for music playback, this muting may seem awkward because the beginning of each track may be affected. You can change the format auto-

sensing to eliminate this muting, if you wish. To do so, switch the unit into standby. Press the DTS button (13) on the front panel and switch the Audio+Video Standard out of standby to power on (operate). This will disable the automatic muting feature of the Audio+Video Standard and will alter the way in which the automatic format sensing operates. For best results, select DTS prior to listening to any DTS encoded material and be careful to select the proper format for each piece of software played through the digital inputs.

To re-engage the automatic muting feature, switch the Audio+Video Standard into standby and toggle the main power switch (38) on the rear panel to the off position. When you restart your Audio + Video Standard, the automatic muting feature will be active. Be sure to turn all amplifiers off when switching the main power switch on and off.

Dolby Digital engages Dolby Digital (AC-3) processing for use with Dolby Digital (AC-3) encoded source material. The Audio + Video Standard automatically switches to Dolby Digital (AC-3) processing upon receiving a Dolby Digital (AC-3) encoded signal. No user intervention is required after the appropriate digital input is selected and connected.

Dolby Pro Logic engages Dolby Pro Logic circuitry for use with all Dolby surround processing encoded material. This includes laser discs, videotapes, television broadcasts, and compact discs.

DTS engages DTS digital surround processing for use with DTS encoded source material. The Audio + Video Standard automatically switches to DTS processing upon receiving a DTS signal. No user intervention is required after the appropriate digital input is selected and connected.

Music engages Krell Music Surround™ circuitry for use with stereo recordings.

Mono is for use with monophonic recordings. This provides monaural output from the center speaker and subwoofer(s) only. If the system does not include a center speaker, the monaural signal is split between the left and right speakers.

Preamp disengages all surround processing circuitry for use with stereo recordings. When fed an analog source, the Audio + Video Standard functions as a pure Class A, high resolution, analog preamplifier. For digital sources, the Audio + Video Standard employs 24-bit, custom Krell®-written, digital-to-analog conversion software before being sent to the analog preamplifier stage.

43 Levels Buttons

These buttons select one of the Audio + Video Standard's volume channels.

Master selects all channels for system-wide volume control.

Balance (Preamp Mode Only) adjusts the left-to-right balance of the system.

Mute interrupts any audio signal to source equipment.

44 Power Button

The power button toggles the Audio + Video Standard from standby to operate.

45 Vol Down / Vol Up Buttons

The vol down and vol up buttons control the volume for either the entire system or for an

individual channel, as selected by the levels buttons (43).

46 Amplifier Buttons
The power and meter buttons operate Krell® amplifiers.

47 System Buttons
These buttons select a preassigned video input. Once a video input is assigned, it may then be linked to a specific audio input and surround mode. *For details on this assigning and linking procedure, see* ***Direct Access Remote Control System Programming*** *on page 24.*

48 Video Buttons
These buttons select the video source. CV1-CV4 are composite video inputs, and SV1-SV4 are S-video inputs.

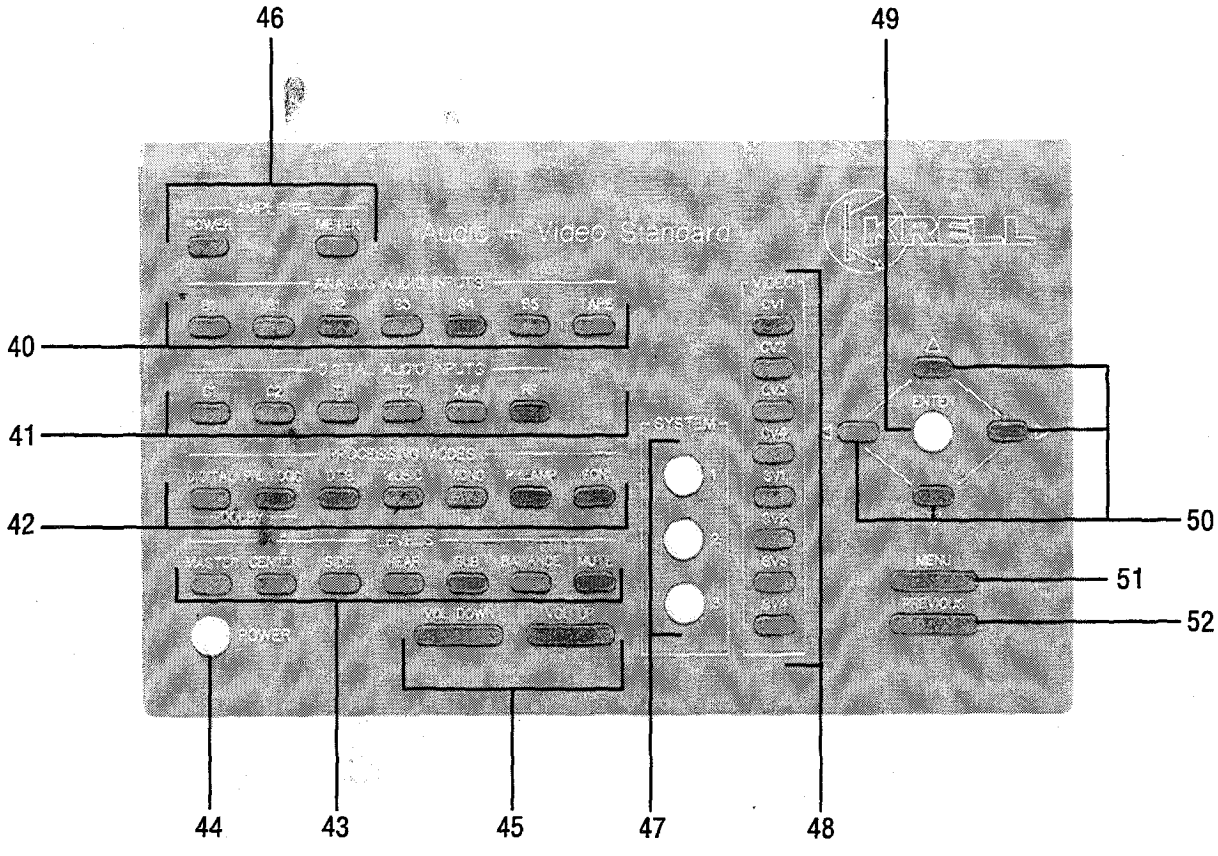
49 Enter Button
This button inputs on-screen menu selections (functions only in the menu mode).

50 Scroll Buttons
These four buttons scroll on-screen menu options, and also are used for volume control.

51 Menu Button
This button accesses the on-screen menu functions.

52 Previous Button
This button escapes or ends certain on-screen menu operations.

FIGURE 3 AUDIO + VIDEO STANDARD REMOTE CONTROL



40 Analog Audio Input Buttons
41 Digital Audio Input Buttons
42 Processing Mode Buttons
43 Levels Buttons
44 Power Button
45 Vol Down / Vol Up Buttons
46 Amplifier Buttons
47 System Buttons
48 Video Buttons
49 Enter Button
50 Scroll Buttons
51 Menu Button
52 Previous Button

BATTERY INSTALLATION AND REMOVAL

Note

Batteries should be replaced when functions from the remote control become intermittent. The Audio + Video Standard remote uses four AAA size 1.5 volt batteries.

1. Remove the backplate to expose the batteries.
2. Remove the old batteries.
3. Install the new batteries, following the battery position diagram on the plastic battery receptacle.
4. Re-install the backplate.
5. Check to make sure the remote control is functioning properly.

System Configuration

The remote control is the main input device for the Audio + Video Standard. All initial setup and subsequent system configuration adjustments must be made via the remote control. The remote control also includes functions for Krell® power amplifiers.

For maximum performance, the Audio + Video Standard needs to be configured for system elements, their capabilities, and positions within the listening room. This information is entered into the Audio + Video Standard via on-screen menus. These menus are structured to guide you through the setup process.

ACCESSING THE MAIN MENU

To begin the system configuration procedure, connect the on-screen video output of the Audio + Video Standard (28 or 35) to your video monitor. Set the video monitor to this input. Press the remote control menu button (51) and the main menu screen will appear:

KRELL A+V STANDARD
- MAIN MENU -

CONFIGURE SPEAKERS
LISTENING ROOM SETUP
CALIBRATE VOLUME
CONFIGURE INPUTS
CONFIGURE MUSIC MODE

OPERATION

The Audio + Video Standard is now ready for configuration.

STEP 1
CONFIGURE SPEAKERS

To configure the Audio + Video Standard for the specific types of speakers used in the system, highlight CONFIGURE SPEAKERS and press the enter button (49). The speaker system setup menu will appear:

KRELL A+V STANDARD
- SPEAKER SYSTEM SETUP -

PRSNT		TYPE
	FRNT:	FULL-RANGE
(X)	CNTR:	FULL-RANGE
(X)	SIDE:	FULL-RANGE
(X)	REAR:	FULL-RANGE
(X)	SUBS:	DUAL MONO

OK

The FRNT (front), CNTR (center), SIDE, REAR, and SUBS (subwoofers) indicate possible speaker locations. The (X) indicates speakers that are currently present in the system (the front speakers cannot be defeated, hence the absence of parentheses).

For the FRNT, CNTR, SIDE, and REAR selections, the on-screen menu offers the options of full range or bass limited. The proper choice depends upon the low frequency capabilities of each speaker. For the SUBS selection, the on-screen menu offers the options of mono, dual mono, stereo, or front and rear.

The default settings are displayed for each speaker. If your system corresponds to the default settings, highlight OK and press Enter. You will be returned to the main menu, and you may proceed to Step 2, listening room setup. If you need to modify the speaker settings, proceed as follows:

Modifying speaker settings

To disable a speaker, highlight the appropriate (x) and press Enter.

To enable a speaker, highlight the appropriate ( ) and press Enter.

To change the settings for the FRNT, CNTR, SIDE, or REAR, highlight the appropriate phrase and press Enter. The speaker setup menu will appear:

KRELL A+V STANDARD
-SPEAKER SETUP-

IF THESE SPEAKERS ARE NOT DESIGNED TO REPRODUCE DEEP BASS, CHECK THE BOX BELOW:

( ) BASS LIMITED SPKR

OK

If the selected speaker does not have the capability to reproduce low frequencies, highlight the ( ), press Enter, highlight OK and press Enter again. You will be returned to the speaker system setup menu. The on-screen phrase for the selected speaker will now read BASS LIMITED.

To change the settings for the subwoofers, highlight SUBS and press Enter. The configure subwoofers menu will appear:

KRELL A+V STANDARD
- CONFIGURE SUBWOOFERS -

SELECT A CONFIGURATION:

( ) SINGLE MONO SUB
(X) DUAL MONO SUBS
( ) STEREO SUBS
( ) FRONT & REAR SUBS

OK

Highlight the appropriate ( ) that represents the subwoofer configuration in your system and press Enter. The (x) will now appear next to the new subwoofer setting. Highlight OK and press Enter. You will be returned to the speaker system setup menu. Highlight OK and press Enter again to return to the main menu.

STEP 2
LISTENING ROOM SETUP

To tell the Audio + Video Standard where each speaker is located within the listening room, highlight LISTENING ROOM SETUP and press Enter. The listening room setup menu will appear:

KRELL A+V STANDARD
- LISTENING ROOM SETUP -

LEFT	CENTER	RIGHT
0 FT	0 FT	0 FT
L SIDE	SUB 1	R SIDE
0 FT	0 FT	0 FT
L REAR	SUB 2	R REAR
0 FT	0 FT	0 FT

The 0 FT under LEFT will be highlighted. Press Enter and the 0 will start blinking. Use the up scroll button (50) to increase the number to the correct distance in feet from the main listening position to the left speaker. Press Enter again and the number will stop blinking. Use the right scroll button to highlight the 0 FT under CENTER. Press Enter and the 0 will start blinking. Using the same procedure as before, input the correct distance for the center speaker. Do the same for the remaining speakers in the system. After all the distances are set, press the Previous button (52) to return to the main menu.

Note

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

STEP 3
CALIBRATE THE VOLUME

Note

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

To adjust individual speaker outputs for proper balance throughout the system, highlight CALIBRATE VOLUME and press Enter. The calibrate volume menu will appear:

KRELL A+V STANDARD
- CALIBRATE VOLUME -

SELECT THE CHANNEL CALIBRATION METHOD

AUTO NOISE SEQUENCE
MANUAL NOISE SEQUENCE
PROGRAM MATERIAL

Highlight one of the choices and press Enter. If you choose AUTO NOISE SEQUENCE or MANUAL NOISE SEQUENCE, the message INITIALIZING... will blink while the Audio + Video Standard loads its internal noise generator. The following screen will then appear:

KRELL A+V STANDARD
- CALIBRATE VOLUME -

LEFT	CENTER	RIGHT
0 DB	0 DB	0 DB
L SIDE	SUB 1	R SIDE
0 DB	0 DB	0 DB
L REAR	SUB 2	R REAR
0 DB	0 DB	0 DB

Auto Noise Sequence

Set the SPL meter to C weighting and slow response. After initializing, the LEFT channel dB setting will be blinking, and banded white noise will be heard through the left speaker. This noise will continue for two seconds and then move clockwise to the next speaker in the system. Using the up or down scroll buttons, adjust each speaker's setting until the SPL meter reads 75dB. This adjustment must be made while the individual channel is blinking. Repeat for all remaining speakers. When all the speakers are set, press Previous 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 will be highlighted. Press Enter and white noise will be heard from the left speaker as the 0 starts blinking. Using the up or down scroll buttons, adjust the setting until the SPL meter reads 75dB. Press Enter and use the right scroll button to highlight the CENTER channel dB setting. Using the same procedure as before, set the CENTER channel volume to 75 dB. Repeat for all remaining speakers. When all the speakers are set, press Previous twice to return to the main menu.

Notes

When using an external noise generator for volume configuration, sound will output simultaneously from all speakers in the system. Adjustments can be made to any speaker in the system with the results immediately apparent to the balance of the whole system.

Any speaker not configured in the speaker system setup menu will display N/A (Not available) for the dB specification.

The subwoofer designation will change depending on the configuration entered in the speaker system setup menu. For a mono setup, the subwoofers are designated SUB 1 and SUB 2. For a left and right stereo setup, the subwoofers are designated SUB L and SUB R. For a front and rear setup, the subwoofers are designated SUB F and SUB R.

STEP 4
CONFIGURE THE INPUTS

To configure inputs, highlight CONFIGURE INPUTS and press Enter. The configure inputs menu will appear:

KRELL A+V STANDARD
- CONFIGURE INPUTS -

EDIT INPUT NAMES
SET ANALOG INPUT LEVEL
SET VIDEO INPUT LINKS
PAL VIDEO SETUP

Highlight EDIT INPUT NAMES and press Enter. The input name type menu will appear:

KRELL A+V STANDARD
- INPUT NAME -

WHAT TYPE OF INPUT NAME
DO YOU WANT TO CHANGE?

VIDEO
ANALOG
DIGITAL

Highlight VIDEO and press Enter. The input name menu will appear:

KRELL A+V STANDARD
- INPUT NAME -

WHICH INPUT NAME
DO YOU WANT TO CHANGE?

S-VIDEO INPUTS
SV1 SV2 SV3 SV4

COMPOSITE VIDEO INPUTS
CV1 CV2 CV3 CV4

Highlight any of the S-video or composite video inputs and press Enter. A secondary screen will appear (S-video 1 is shown as an example):

KRELL A+V STANDARD
- INPUT NAME -

INPUT: S-VIDEO 1
NAME: S-VIDEO 1

← & → TO MOVE CURSOR
↑ & ↓ TO CHANGE TEXT
PRESS ENTER WHEN DONE

The first letter of the input name will blink and can be changed using the up or down scroll buttons. Move the blinking cursor to the letter you want to change and adjust to the letter of your choice. The name field is limited to a maximum of 12 characters. Available characters are:

A-Z 1-9 : < > - . ,

and a blank space. When completed, press Enter to finish the editing and return to the input name menu. Choose another input to adjust or press Previous to return to the input name menu. Choose another input name to modify or press Previous to return to the configure inputs menu.

Special Analog Sources

The analog input sensitivity of the Audio + Video Standard is set for the standard 2 Volts that Dolby Laboratories mandates for proper Dolby Pro Logic processing. For analog sources (components connected to S1-S5 and tape) that do not correspond to a standard 2 Volt output specification, it may be necessary to adjust individual input levels on the Audio + Video Standard.

Press Menu to exit the menu system, select the desired analog input and return to the configure inputs menu.

Highlight SET ANALOG INPUT LEVEL and press Enter. The set input levels menu will appear:

KRELL A+V STANDARD
- SET INPUT LEVELS -

INPUT: B1

L R

- OVERLOAD -

LEVEL: 0 DB

OK

Begin playback of the selected source using program material with loud passages. Press Enter. The LEVEL dB specification will begin blinking.

If the source unit's output is greater than the standard 2 Volts, OVERLOAD will blink indicating an input signal greater than standard. Using the down scroll button, lower the level db setting until OVERLOAD stops blinking.

Conversely, if the source unit's output is less than the standard 2 Volts, it will be necessary to raise the input level sensitivity for proper Dolby surround processing. Using the up scroll button, raise the level dB setting until OVERLOAD starts blinking and then reduce the setting just below this threshold.

When the input level has been properly set, highlight OK and press Enter to return to the configure inputs menu. To adjust additional inputs, exit the menu system by pressing Menu, select the desired input, return to the set input levels menu within the configure inputs menu, and follow the same procedure as above.

Linking a Video Input to an Audio Input

Each video input (S-video and composite video) may be linked to a specific audio input and surround mode. Therefore, when a video input is configured and then selected, its matching audio input and surround mode will also engage. Highlight SET VIDEO INPUT LINKS within the configure inputs menu and press Enter. The set video input links menu will appear:

KRELL A+V STANDARD
- SET VIDEO INPUT LINKS -

WHICH VIDEO INPUT LINKS
WOULD YOU LIKE TO SET?

S-VIDEO INPUTS
SV1 SV2 SV3 SV4

COMPOSITE VIDEO INPUTS
CV1 CV2 CV3 CV4

Highlight any of the S-video or composite video inputs and press Enter. A secondary screen will appear:

KRELL A+V STANDARD
- LINK INPUT -

WHICH INPUT LINK
DO YOU WANT TO CHANGE?

ANALOG
DIGITAL
MODE

Highlight the audio input style, either ANALOG or DIGITAL, and press Enter. If ANALOG is selected, an additional screen appears:

KRELL A+V STANDARD
- LINK INPUT -

SELECT AN ANALOG INPUT
TO LINK TO SV1:

( ) B1 ( ) S1 ( ) S2
( ) S3 ( ) S4 ( ) S5

OK

Highlight the appropriate analog input and press Enter. When completed, highlight OK and press Enter to return to the link input menu. At this point you may choose a digital input or operating mode to link with the selected video input.

To select a linked digital input, highlight DIGITAL and press Enter. The digital link input screen will appear:

KRELL A+V STANDARD
- LINK INPUT -

SELECT A DIGITAL INPUT
TO LINK TO SV1:

( ) COAX 1 ( ) OPTIC 1
( ) COAX 2 ( ) OPTIC 2
( ) AES-EBU ( ) RF

OK

Note

If a video input is linked to both a digital and an analog input, the Audio + Video Standard will select the digital input as the main audio source whenever the video input is selected.

When completed, highlight OK and press Enter to return to the link input menu. At this point you may choose to change the linked operating mode. To change a linked operating mode, highlight MODE and press Enter. The operating mode link input screen will appear:

KRELL A+V STANDARD
- LINK INPUT -

SELECT A MODE TO LINK
TO SV1:

(X) MOVIE
( ) MUSIC
( ) PREAMP

OK

Notes

If a video input is linked to a digital input and MOVIE is in the linked mode, the Audio + Video Standard will select the appropriate digital surround processing mode, either Dolby Pro Logic, Dolby Digital or DTS, depending upon which signal is present.

If a video input is linked to an analog input and MOVIE is the linked mode, the Audio + Video Standard will select Dolby Pro Logic as the surround processing mode.

If a video input is linked to any analog or digital input and MUSIC or PREAMP is the linked mode, the Audio + Video Standard will process the linked audio signal in the selected mode, unless the input is a digital signal containing either Dolby Digital or DTS data. In

this case, the appropriate processing mode will be selected.

Highlight the desired mode and press Enter. When completed, highlight OK and press Enter to return to the link input menu. Select another video input to link or press Previous to return to the configure inputs menu.

Direct Access Remote Control System Programming

System programming functions allow you to simplify the use of your Audio + Video Standard by naming three sets of linked inputs, System 1, 2, and 3 (47). Other links may be created in the Audio + Video Standard, but primary links may be set up and remembered more easily with the System function. For example:

System button 1 A laser disc connected to the RF input and a video input, set for MOVIE MODE.

System button 2 A DVD player connected to the C1 input and a video input, set for MOVIE MODE.

System button 3 A CD player connected to an analog input and an unused video input, set for preamp mode.

To use the system programming function, the basic input links need to be created. *For details, see **Linking a Video Input to an Audio Input** on page 22.* To assign input links to System 1, 2, or 3, follow the instructions below.

1. Push and release one of the three system buttons.

2. Decide which video input you want to assign to the system button. Push and hold the appropriate video button down for approximately five seconds. Note that the red LED in the upper left corner of the remote control will blink. When the blinking stops and the light stays lit for one second the system is linked to the video input you selected.

3. Link the video inputs to a specific audio input and surround mode.

Selecting the Broadcast Standard

The Audio + Video Standard will operate in both the NTSC and PAL broadcasting standards. For countries that only use the NTSC broadcasting standard, all S-video and composite video inputs are already set for proper NTSC operation. For countries that use both the NTSC and PAL broadcasting systems, the SV-3, SV-4, CV-3, and CV-4 are factory set to the PAL operating system. To adjust the broadcast operating settings for any of the video inputs, enter the PAL video setup menu located within the configure inputs menu:

KRELL A+V STANDARD
- PAL VIDEO SETUP -

SELECT THE INPUTS THAT
HAVE PAL VIDEO SOURCES:

( ) SV-1 ( ) CV-1
( ) SV-2 ( ) CV-2
( ) SV-3 ( ) CV-3
( ) SV-4 ( ) CV-4

OK

Highlight the inputs that have PAL video sources attached to them and press Enter so that an (x) appears next to the desired input. To defeat a PAL video source, press Enter so the x disappears. When completed, highlight OK and press Enter to return to the

configure inputs menu. Press Previous to return to the main menu.

STEP 5
CONFIGURE THE MUSIC MODE

It is often desirable to have the settings for music listening different from movie listening. Highlight CONFIGURE MUSIC MODE and press Enter. The configure music mode screen will appear:

KRELL A+V STANDARD
- CONFIGURE MUSIC MODE -

THE A+V STANDARD WILL
BE SET TO MUSIC MODE.

OK TO CONTINUE?

YES NO

Highlight YES and press Enter. The configure music mode screen will appear:

KRELL A+V STANDARD
- CALIBRATE MUSIC MODE -

ADJUST OUTPUT LEVELS

CONFIGURE SPEAKERS

- NOTE -
THESE ADJUSTMENTS ARE
FOR MUSIC MODE ONLY!

Highlight CONFIGURE SPEAKERS and press Enter. A second screen will appear:

KRELL A+V STANDARD
- CONFIGURE MUSIC MODE -

SELECT THE SPEAKERS TO
BE ACTIVE IN MUSIC MODE.

( ) SIDE SPEAKERS
( ) REAR SPEAKERS

OK

Highlight the speakers to be active in the music mode and press Enter. When completed, highlight OK and press Enter to return to the main configure music mode menu. Before proceeding, highlight ADJUST OUTPUT LEVELS and press Enter. The configure music mode menu will appear:

KRELL A+V STANDARD
- CALIBRATE MUSIC MODE -

LEFT		RIGHT
0 DB		0 DB
L SIDE	SUB 1	R SIDE
0 DB	0 DB	0 DB
L REAR	SUB 2	R REAR
0 DB	0 DB	0 DB

The displayed speaker array will duplicate the system profile input into the speaker system setup menu. The center speaker is not displayed because it is not active in the music mode. The Audio + Video Standard is now calibrated and setup for all movie modes and music mode. Select the appropriate audio and video input and simply turn up the volume.

Operation

The operation menu offers options for a variety of Audio + Video Standard user operations and features. From the main menu, highlight OPERATION and press Enter. This operation menu will appear:

KRELL A+V STANDARD
- OPERATION -

BACKGROUND COLOR
MAIN VOLUME DISPLAY
ON-SCREEN DELAY TIME
INPUT LINK PROPERTIES
REMOTE CONTROL SENSOR
FULL SURROUND SETUP
ANTI-CLIP CONTROL

BACKGROUND COLOR

Highlight BACKGROUND COLOR and press Enter. The background color menu will appear:

KRELL A+V STANDARD
- BACKGROUND COLOR -

MENU BACKGROUND COLOR:

(X) BLACK
( ) BLUE
( ) GREEN
( ) RED

OK

The default background color is black. If blue, green, or red is preferred, highlight the appropriate ( ) and press Enter. The background color will immediately change to the new setting. When you are finished, highlight OK and press Enter to return to the operation menu.

VOLUME

The default on-screen volume display is numerical. The Audio + Video Standard's volume control ranges from 0 to 152 with 89 representing the Dolby reference level. To change the main volume to a bar graph display, highlight MAIN VOLUME DISPLAY and press Enter. The main volume display menu will appear:

KRELL A+V STANDARD
- MAIN VOLUME DISPLAY -

HOW WOULD YOU LIKE THE
MAIN VOLUME DISPLAYED?

(X) BARGRAPH DISPLAY
( ) NUMERIC DISPLAY

OK

Highlight the ( ) beside BARGRAPH DISPLAY and press Enter. The on screen display will now show the current volume setting relative to maximum volume. Total volume is represented by sixteen dots. As volume increases, squares replace the dots. At Dolby reference level 89, the volume control pauses and displays REF on screen. When finished, highlight OK and press Enter to return to the operation menu.

ON-SCREEN DELAY TIME

On-screen information remains visible for three seconds. The on-screen delay time has a range from one to five seconds. To adjust, highlight ON-SCREEN DELAY TIME and press Enter. The on-screen delay time menu will appear:

KRELL A+V STANDARD
- ON-SCREEN DELAY -

HOW LONG WOULD YOU LIKE
THE TEXT TO REMAIN ON
THE SCREEN AFTER VOLUME
ADJUSTMENT OR CHANGING
INPUTS AND MODES?

3 SECONDS

Press Enter and the 3 will begin blinking. Use the up or down scroll buttons to increase or decrease the on-screen time setting and then press Enter to lock in the new setting. When finished, press Previous to return to the operation menu.

INPUT LINK PROPERTIES

The input linking feature activates as soon as the inputs are joined in the configure inputs menu. These links are not shown on-screen unless instructed. To change either of these settings, highlight INPUT LINK PROPERTIES and press Enter. The input link properties menu will appear:

KRELL A+V STANDARD
- INPUT LINK PROPERTIES -

(X) ENABLE INPUT LINKS

( ) SHOW LINKS WHILE
CHANGING INPUTS

OK

To disable the input links, highlight the (X) next to ENABLE INPUT LINKS and press Enter. The video, audio, and mode settings now operate independently. To display the input links, highlight the ( ) next to SHOW LINKS WHILE CHANGING INPUTS and press Enter. The video, audio, and mode settings of the active link plus the current volume setting will be displayed on-screen whenever a video input is changed.

REMOTE CONTROL SENSOR

The Audio + Video Standard receives infrared remote commands at the front panel infrared sensor (18). Additionally, the Audio + Video Standard features a duplicate remote sensor and a male baseband infrared connector (29) on the rear panel. These rear panel infrared components may be used to facilitate a custom installation. To activate these features, highlight REMOTE CONTROL SENSOR and press Enter. The remote control sensor menu will appear:

KRELL A+V STANDARD
- REMOTE CONTROL SENSOR -

(X) USE FRONT SENSOR

( ) USE REAR SENSOR

OK

Highlight the ( ) next to USE REAR SENSOR and press Enter. The rear infrared sensor will now be active and the front panel infrared sensor will be disabled. When finished, highlight OK and press Enter to return to the operation menu.

Note

To reactivate the front infrared sensor, the Audio + Video Standard must be in standby mode. While holding the front panel S-video button (6) and the composite video button (5) down, simultaneously press the power button (8).

FULL SURROUND SETUP

For systems with both side and rear speakers, the Audio + Video Standard offers the option of operating both pairs of surround

speakers in all theater modes. To activate both pairs of speakers in any theater mode, highlight FULL SURROUND SETUP on the operation menu and press Enter. The full surround setup menu will appear:

KRELL A+V STANDARD
- FULL SURROUND SETUP -

IF YOU WOULD LIKE BOTH
THE SIDES AND REARS ACTIVE
IN ALL THEATER MODES
CHECK THE BOX BELOW:

( ) FULL SURROUND MODE

OK

Highlight the ( ) next to FULL SURROUND MODE and press Enter. When finished, highlight OK and press Enter to return to the operation menu.

ANTI CLIP CONTROL

For proper Dolby Pro Logic surround processing when using an analog source, an anti-clip circuit is used to prevent over-driving the Dolby surround processing circuitry. The Audio + Video Standard presents a CD or DAT recordable signal to the digital outputs when an analog signal is inputted. When recording an analog music source onto a digital medium, the use of the anti-clip control may limit dynamics and impart an unwanted compression to the music.

To disable the anti-clip control, highlight ANTI-CLIP CONTROL on the operation menu and press Enter. The anti-clip control menu will appear:

KRELL A+V STANDARD
- ANTI-CLIP CONTROL -

(X) ENABLE

( ) DISABLE

OK

Highlight the ( ) next to DISABLE and press Enter. When finished, highlight OK and press Enter to return to the operation menu.

Note
The anti-clip control will be reactivated when an input is changed.

Saving, Recalling, and Clearing Configuration Settings

To save your configuration settings, turn the Audio + Video Standard off from the front panel or the remote control. While pressing the recall button (17), press the power button (8) on the front panel. The main display will read SAVE CNFG when the settings have been stored in the Audio + Video Standard's non-volatile memory.

To recall your stored configuration settings, press Recall until RSTR CNFG appears in the main display. This will take thirteen seconds.

To clear all settings, turn the Audio + Video Standard off from the front panel or the remote control. While pressing both master (19) and balance (21) buttons, press the power button on the front panel. The main display will read CLR when the settings have been erased from the Audio + Video Standard's non-volatile memory.

Warranty

Krell® warrants this product to be free from defects in material or workmanship for a period of five years for circuitry from the original date of purchase. 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. Transfer of warranty to a second owner occurs automatically. Please contact Krell® to have the name on the warranty changed. Transfer of warranty does not extend the duration of the original warranty period.

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

The warranty period begins on the date of retail purchase as noted on the retail sales slip provided by an authorized Krell® dealer or distributor, or on the warranty registration card sent to Krell®. In the event that an adequate proof of purchase date is unavailable, the warranty period will begin on the date the product was originally shipped from the factory. The warranty described in this paragraph shall be in lieu of any other warranty, express 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.

The warranty for this Krell® product is valid only in the country to which the product was 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.

Freight to the factory is your responsibility. Return freight within the United States (U.S.A.) is included in the warranty. If you have 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 product from the freight forwarder to you are also your responsibility.

The operating voltage of this product is determined at 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 for six months from the original purchase date.

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

Return Authorization Procedure

IMPORTANT

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 on our website at www.krellonline.com.

To return a 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 or damage to the product during shipment to the Krell® factory and prepay all shipping charges. The product may also be hand delivered if arrangements with the Service Department have been made in advance. Proof of purchase may be required for warranty validation at the time of hand delivery.

3. Use the original packaging to insure the safe transit of the product to the factory, dealer, or distributor. The use of any packaging material other than the original packaging materials is not recommended. Krell® may, at its discretion, return a 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 the product is returned. To purchase additional packaging, please contact your authorized Krell® dealer, distributor, or the Krell® Service Department for assistance.

Krell® is not responsible for any damage incurred in transit. Krell® will file claims for damages as necessary for products damaged in transit to the factory. The owner is responsible for filing claims for shipping damages that occur during the return shipment.

Replacement parts and/or products will be furnished 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.

In the event Krell® receives a product for warranty service which 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 specification will be charged to the customer, at current parts and labor rates.

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 **krell@krellonline.com**

Audio + Video Standard

PRODUCT SERIAL NUMBER

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

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E-MAIL krell@krellonline.com
WEB SITE www.krellonline.com

Audio + Video Standard Surround Preamp/Processor

Specifications

ANALOG AUDIO INPUTS

5 single-ended via RCA
1 balanced via XLR
1 single-ended tape input

DIGITAL AUDIO INPUTS

2 coaxial, 2 TosLink™
1 AES/EBU
1 RF input for Dolby Digital (AC-3)

VIDEO INPUTS

4 S-Video
4 Composite
1 BNC

ANALOG CHANNEL OUTPUT

Left, center, right, side surrounds, rear surrounds, 2 subwoofers
Balanced via XLR,
or single-ended via RCA

ANALOG TAPE OUTPUTS

1 audio via RCA
2 video via RCA

DIGITAL OUTPUTS

1 coaxial
1 TosLink™

VIDEO OUTPUTS

3 S-Video
(1 with on-screen graphics)
3 Composite
(1 with on-screen graphics)
1 BNC
(with on-screen graphics)

LISTENING MODES

Dolby Digital (AC-3), DTS, Dolby Pro Logic, Music, Mono, Preamp

DIMENSIONS

19w x 6.75h x 17d in.
48.3w x 17.2h x 43.2d cm.

WEIGHT

Shipped	42 lbs., 19.1 kg
Unit only	24 lbs., 10.9 kg

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