

## AC POWER GUIDELINES

Because of its powerful amplifier channels and high-capacity power supply, the Vanguard will benefit from a dedicated AC circuit. Avoid connections through extension cords or multiple AC adapters. High quality AC power strips are acceptable. Please contact your authorized Krell dealer, distributor before using any devices designed to alter or stabilize the AC power for the Vanguard.

## Connecting the Vanguard to Your System

*Krell recommends using balanced interconnect cables. Balanced interconnect cables not only can minimize sonic loss but are also immune to induced noise, especially with installations using long cables. Balanced connections have 6 dB more gain than single-ended connections. When level matching is critical, keep this gain value in mind.*

Follow these steps to connect the Vanguard to your system.

1. Make sure all power sources and components are off before connecting inputs and outputs.
2. Neatly organize wiring between the Vanguard and all system components. Separate AC wires from audio cables to prevent hum or other unwanted noise from being introduced into the system.
3. Connect an Ethernet cable from your network router to the integrated amplifier's Ethernet port (14). Although, not necessary for operation, connection to your home network allows easy software updates for future feature enhancements.
4. Connect the left and right loudspeaker cables to the integrated amplifier's left and right loudspeaker output terminals (13).
5. Connect the left and right outputs of your source components to the appropriate analog inputs (15, 16) on the Vanguard.
6. If equipped with the optional digital module, connect digital sources to the appropriate digital inputs (20) on the Vanguard.
7. Plug the AC cord into the IEC connector (19) on the back panel of the Vanguard. Plug the remaining end into the AC wall receptacle. Turn on the power switch on the rear panel. The red stand-by indicator (2) illuminates and the display shows the software version, serial number, and IP address.

## Operating the Vanguard

When powering up any system, always turn amplifiers on last. When powering down, always turn amplifiers off first.

1. When the amplifier is in stand-by mode, with the red stand-by indicator (2), turn the amplifier on by pressing the power button on the front panel or the power key on the remote control (1). There are audible clicks. The blue power indicator (2) illuminates. The Vanguard is now in the operational mode.
2. With the amplifier in the mute position, or the volume control fully attenuated, select a source from the front panel or the remote control.
3. Start playing the source.
4. Set the volume to a comfortable listening level using the up or down keys on the front panel or the level keys on the remote control (3).
5. To turn the amplifier off, press the power button on the front panel or the power key on the remote control (1). The red stand-by indicator (2) illuminates. It is now safe to turn off the rest of the system.



# Vanguard

## Integrated Amplifier

## SETUP GUIDE

## Getting Started

Thank you for your purchase of the Krell Vanguard Remote Control Integrated Amplifier. This fully integrated amplifier and preamplifier has a discrete signal path from input to output and employs a wide bandwidth design with low negative feedback for sonic accuracy throughout the frequency spectrum. All circuits up to the driver stage operate in pure Class A.

Krell's new surface mount technology (SMT) means that the Vanguard is an integrated amplifier with big power—200 Watts per channel—that does not require big space. SMT allows individual circuit elements to be placed very close together. This shortens signal paths and allows circuit elements to operate at the same temperature, resulting in more accurate signal transfer and enhanced reliability.

The Vanguard is easy to operate and integrate into your system. The remote control accesses all amplifier functions, and remote control connection options allow the Vanguard to be easily connected with other components. The Theater Throughput feature provides easy integration of the amplifier into a home theater system. An optional digital module adds a full range of digital technologies and connections.

Do not place the integrated amplifier where it could be exposed to dripping or splashing.

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

The ventilation slots on the top and bottom of the integrated amplifier must be unobstructed at all times during operation. Do not place flammable material on top of or beneath the component.

Turn off all systems' power before connecting the integrated amplifier to any component.

Make sure all cable terminations are of the highest quality, free from frayed ends, short circuits, or cold solder joints.

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

1. Open the shipping box and remove the top layer of foam. You will see these items:
  - 1 Vanguard unit
  - 1 Owner's Reference
  - 1 Remote control
  - 1 T-10 Torx wrench for remote
  - 2 AAA remote batteries
2. Carefully remove all items from the shipping box.
3. Place the preamplifier and power supply in a safe location and remove the protective plastic wrapping.

Place the Vanguard on a firm, level surface, away from excessive heat, humidity, or moisture. The integrated amplifier requires at least one inch (2.54 cm) of clearance on each side and at least two inches (5 cm) of clearance above to provide adequate ventilation. Installations inside cabinetry may need extra ventilation.

## WARNINGS



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

*This CLASS 1 apparatus must be connected to a MAINS socket outlet with a protective earthing connection.*

## Unpacking

### Note

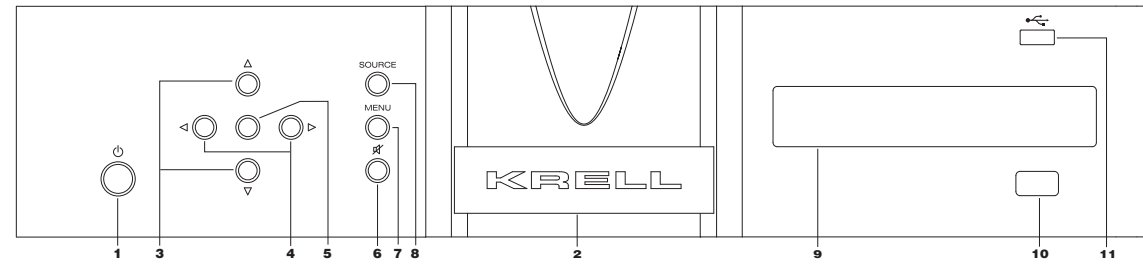
*Save all packing materials. If you need to ship the Illusion II in the future, repack the unit in its original packaging to prevent shipping damage.*

## Placement

MODEL: Vanguard Integrated Amplifier

SERIAL NUMBER:

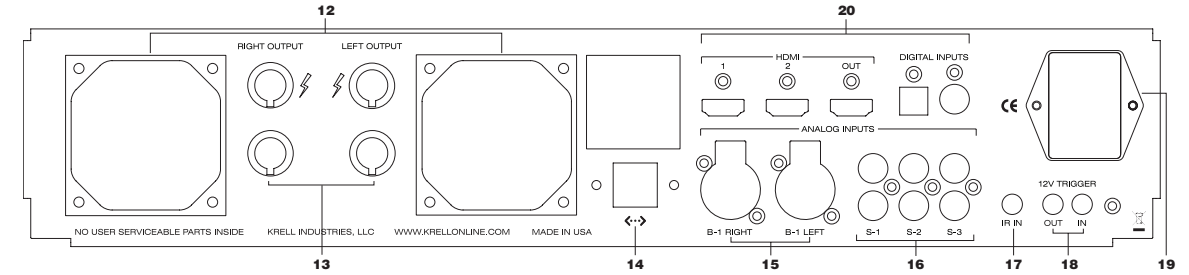
Figure 1 The Vanguard Front Panel



Front Panel

- 1 Power**  
Use this button to switch the Vanguard between stand-by and operational modes.
- 2 Stand-by Indicator**  
The stand-by indicator illuminates red when the Vanguard is plugged into a standard AC wall receptacle and the rear panel power switch is in the 1 position. The indicator illuminates blue when the Vanguard is in operational mode.
- 3 Volume/Navigation Up/Down Buttons**  
Use these buttons on the front panel to adjust the amplifier output level and navigate through the menu system. The output level is indicated numerically on the front panel display, with a range from 0-150.
- 4 Left/Right Navigation Buttons**  
Use these buttons on the front panel or on the remote control to navigate through the menu system.
- 5 Enter Button**  
Press the enter button or use the enter key to confirm menu selections.
- 6 Mute Button**  
Use this to mute the Vanguard output. To unmute, press the mute button again.
- 7 Menu Button**  
Use this button to access the menu functions of the Vanguard.
- 8 Source button**  
Use this button to access the source menu.
- 9 Front Panel Display**  
The front panel display shows the input selected, volume, balance, and Theater Throughput status.
- 10 Infrared sensor**  
Receives commands from the remote control. Make sure this is not obstructed.
- 11 USB input**  
Only active when optional digital module is installed.

Figure 3 The Vanguard Back Panel



Back Panel

- 12 Fans**  
The Vanguard is equipped with two cooling fans. Be sure to leave them unobstructed for proper ventilation.
- 13 Loudspeaker Outputs**  
The Vanguard is equipped with standard binding posts for each amplifier channel.
- 14 Ethernet**  
The Ethernet port connects the Vanguard to a home network for control and firmware updates.
- 15 Balanced Analog Inputs**  
The Vanguard is equipped with one pair of balanced (B-1) inputs via XLR connectors.
- 16 Single-Ended Analog Inputs**  
The Vanguard is equipped with three pairs of single-ended (S-1, S-2, or S-3) inputs via RCA connectors.
- 17 IR In**  
The Vanguard is equipped with an RC-5 input that makes custom installation easy and secure by accepting baseband RC-5 input commands from a remote IR detector or hardwired remote controllers.
- 18 12 VDC In/Out (12 V trigger)**  
The 12 V Trigger input allows you to place the Vanguard into the stand-by or operational mode from other components. The 12 V trigger output allows the Vanguard to turn other components on or off.
- 19 IEC Connector/AC Power Breaker**  
The connector is for use with the provided IEC standard 15 amp power cord. This connector and power cord must remain unobstructed for easy removal in case of emergency. Use this power switch to change the Vanguard from off to the stand-by mode.
- 20 Optional Digital module**  
The optional digital module adds one coaxial, one optical, two HDMI inputs and one HDMI output. Additionally, the USB input on the front panel is activated. Bluetooth and Ethernet streaming are also added input sources.

Remote Control

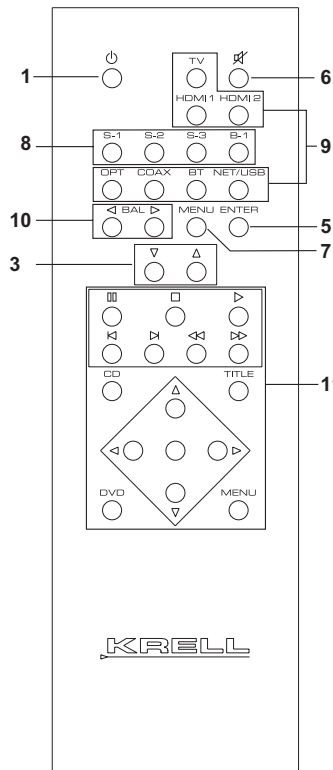


Figure 2 The Vanguard Remote Control

- Keys labeled 1 to 7**  
have the same function (and callout number) as the front panel controls.
  - 8 Analog Input Keys**  
Use these keys to select analog inputs on the Vanguard.
  - 9 Digital Input Keys**  
Use these keys to select digital inputs on the Vanguard. Note: These keys are only active when the optional digital module is installed.
  - 10 BAL (Balance) Keys**  
Use these keys to shift the balance to the left or the right channel: In menu mode, the balance keys are used for left and right navigation.
  - 11 CD / DVD Transport Control**  
Used to control basic CD / DVD functions on other current Krell products.
- Note**  
The remote comes with two AAA batteries that have to be installed. Use the supplied Torx wrench to remove the battery panel, then install the batteries.

Menu Options

The Vanguard menu system offers a number of options and information. Main selections include Source Setup, Serial Number, Save Settings, Restore Settings, Display Setup, Software Update, Software Version, Diagnostic Mode, and Network Setup. Press the Vanguard's menu button (7), then use the navigation buttons or keys to highlight one of the menu options. Press the Enter button or key to select.

**Network Setup**  
Press the up or down button to view the various network parameters. Press the Enter button to see the value for the displayed parameter.

**IP Address:** The default network discovery is DHCP. If the Vanguard is connected to an active network, it automatically acquires an IP address. To enter an IP address manually, change the Vanguard to Static IP operation. To change to Static IP operation, press the Enter button at the IP Address sub menu. Press the Up or Down button to change the setting to Static. Press the Enter button to display the IP address. Press the Right button to move the cursor to number to be edited. Press the Enter button again and the selected number of the IP Address will begin blinking. Use the Up or Down button to edit the IP Address value. Press the Enter button to confirm change. Press the Left or Right button to move the cursor to another number in the IP address and repeat editing process. Use the same process to edit the other network settings.

**Note:** the MAC Address is a factory set value and is not user editable.

**Source Setup**  
Press the Enter Button and use the Up or Down button to highlight the desired parameter to edit. Press the Enter button to select.

**Assign Names:** The first input, BAL : BALANCED is displayed. Press the Up or Down button to select a different source. To edit the currently displayed source, press the Enter button and the cursor will begin flashing at the first character field. Use the Up or Down button to change character. Use the Right or Left button to move the blinking cursor to another character and repeat editing procedure. Press Enter to confirm change. Press the Up or Down button to select a different source and repeat editing process. The edited name will appear when the Source button is pressed on the remote or front panel. The new source name will also appear on a web connected device. Press the Left button to return to the Source Setup Menu.

**Theater Mode:** Theater Mode bypasses the Vanguard volume control and passes the left and right output of a surround processor directly to the Vanguard left and right amplifiers. Use the Left and Right button to highlight the input that is connected to the surround processor. Press the Enter button and the cursor will begin flashing in the Disabled field. Press the Up or Down button to change to Enabled and press the Enter button to select.

**Level Trim**  
The level trim allows for output adjustment between sources. Press the Enter button and the source field will start flashing. Press the Up or Down button to select a different source to edit. Press the Enter and the dB field will begin flashing. Press the Up or Down button to increase or decrease output. Press the Up or Down button to select a different source to edit and repeat the editing process. When finished, press the Enter button and then the Left button to return the Source Setup sub menu.