

**VK-5**

**WARRANTY REGISTRATION FORM**

Unit Serial Number: \_\_\_\_\_

Customer Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Purchased From:

Dealer Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

**IMPORTANT NOTE:**

In order to receive the full five year product warranty, please mail this completed form together with a copy of your sales receipt to Balanced Audio Technology at the address below, within **thirty days** of purchase.

Failure to do so will result in the product being warrantied for **one year** from the date of manufacture.

**VK-5**  
**Balanced Stereo Preamplifier**

**Owner's Manual**

## Introduction

Thank you for your purchase of the Balanced Audio Technology VK-5 preamplifier. Please read this owner's manual to obtain the full benefit of the VK-5 in your system. It will provide you with the needed safety information and operating procedures for this exceptional unit. For more technical information on the circuit design, please read the Balanced Audio Technology VK-5 white paper.

### WARNINGS:

To prevent the possibility of serious injury, electrical shock or fire:

**DO NOT** operate with the cover removed.

**DO NOT** expose to rain or moisture.

**DO NOT** defeat the ground power-plug.

**DO NOT** replace fuse with anything other than the same type and rating as supplied by the factory.

## Package Contents

Included in the box should be the following:

Description	Quantity
VK-5 Preamplifier	1
Power Cord	1
Spare Fuse	1
Torx Wrench (T-10)	1
Spare Top Cover Screws	5
User's Manual	1
Optional Accessories	(as ordered)

Save all the packaging material in a safe dry area for the unlikely event that you need to return the VK-5 to the factory for service.

## Reseating Tubes

Normally, reseating tubes upon delivery is not required. However, if any tubes have *noticeably* drifted out of position due to unusually high transportation stress, it will be advisable to reseat the tubes. Use the supplied Torx wrench to remove the top cover. Reseat the tubes in their sockets and reinstall the top cover.

**NOTE:** When using the Torx wrench, make sure it is fully inserted so that the screw head is not stripped.

## Physical Placement

It is recommended that you provide for at least 6" of free space around the unit for proper ventilation.

Mount the unit on a hard surface with proper ventilation underneath.

Do not stack the VK-5 preamplifier on top of other units, nor vice versa.

## Connecting the VK-5 to Your System

### Balanced Components

Use balanced XLR interconnects. All input and output connectors are clearly marked on the back panel.

**Note:** The VK-5 XLR connectors are wired as follows:

Pin 1:	common/shield
Pin 2:	positive
Pin 3:	negative

Use either the Main 1 or Main 2 Output for connection to your power amplifier. Both yield equivalent results.

### Single-Ended Components

Single-ended components have RCA connectors. The VK-5 preamplifier is designed to work with any mix of single-ended and balanced components connected to its inputs and outputs. All that is required to connect a single-ended component with RCA connectors to the VK-5's inputs or outputs is the optional balanced to single-ended adapters. These adapters are available from Balanced Audio Technology at a nominal charge.

Two types of adapters are available:

Input Adapters: RCA Female to XLR Male

Output Adapters: RCA Female to XLR Female.

### **Mixed Balanced and Single-Ended Systems**

Any mix of single-ended and balanced components can be connected to the VK-5 by following the above instructions.

## **Description of Controls**

### **Power switch:**

The power switch has three positions: Sleep, Off and On. There is no required sequencing between these positions. For example it is not necessary to go from Off to Sleep to On,. The VK-5 can be switched directly from Off to On as described below.

### **Turning the VK-5 On:**

When you turn the unit On, the VK-5 will automatically go through a gentle power-on sequence. At the end of this sequence the unit will automatically unmute, provided the Mute switch is in Play position. However, since the source volume may be unknown at this time, it is advisable to turn the volume control fully counterclockwise and place the mute switch in "Mute" position before powering the unit On.

### **Turning the VK-5 Off:**

The unit can be turned Off at any time (even while playing) without first activating the Mute switch. It will automatically mute. It is also permissible to go directly from On into Sleep mode.

### **Sleep Mode Operation:**

It is important to understand that the "sleep" mode on the VK-5 is different from the usual Standby mode. While Standby mode is commonly used to warm up the preamplifier prior to turning it On, this is not required when operating the VK-5, which does all the power sequencing automatically.

Typical Standby modes apply full filament voltage to tubes while disconnecting the plate voltage sources. The Sleep mode on the VK-5 is different in that it is designed to keep the

tubes in the unit warm, but well below their full operating temperatures. The filament voltage in this mode is reduced to about one half of its nominal value. This allows the user to keep the preamplifier warm for prolonged periods of time without sacrificing tube life. While the VK-5 will sound superb right after turning it On, some owners may prefer to keep it warm (in Sleep Mode) when not in use.

### **Gain Controls:**

Separate left and right gain controls replace the traditional balance control and provide up to 4 dB attenuation for each channel. Turning them counterclockwise will reduce the gain of the corresponding channel. The preferred position is up fully clockwise (pointer at 12 o'clock).

### **Power indicator LED:**

The power indicator light on the VK-5 works as follows:

In **On mode** the LED glows at full brightness indicating normal operation.

In **Sleep mode** the LED brightness is reduced and is roughly proportional to the filament temperatures of the tubes.

When turning the cold unit into Sleep mode for the first time, the tubes will require several minutes before reaching their normal Sleep mode temperatures. Accordingly, the LED power indicator will not turn On immediately, but will gradually become brighter as the tube filaments warm up.

On the other hand, when switching the running unit from On into Sleep mode, the brightness of the LED power indicator will not change immediately, since tube filaments will gradually start cooling off. As they do, the indicator brightness will continue decaying until settling at a steady state, indicating that the tubes have reached their proper Sleep mode temperatures. This may require several minutes.

Going from the Sleep to the On state will produce an immediate increase in the LED power indicator brightness, signaling full power operation.

**Mute function:**

The VK-5 has two mute modes: manual and automatic. Putting the Mute switch in Mute position will always override the automatic function and disable the outputs.

When the unit is powered up it automatically self-mutes until the proper operating points of the circuitry are reached. It will then automatically go into Play mode, provided the Mute switch is in the Play position.

Changing the power switch position from On to either Off or Sleep even for short time, will make the unit reset its power sequencing circuit and mute its output. *It will then require about 45 seconds for the unit to become operational again.*

The mute function is coupled to a low line voltage sensor. When line voltage drops below an allowable value (for example during a brown-out condition) the unit will automatically mute and remove the plate voltages from gain stages. Once the line voltage recovers to a normal level, the VK-5 will resume its operation.

If the line voltage is insufficient for normal operation during turn-On, the unit will not proceed beyond Sleep mode until the line voltage reaches a proper level.

**Overcurrent Protection:**

Both channels in the VK-5 are protected from certain overload conditions via electronic current-sensing circuits. If an overcurrent condition is detected in either channel (for example, a short in one of the regulator tubes), the unit will immediately be disabled, its high voltage supplies disconnected and the output muted. The protection circuit may be reset by turning the unit Off for a short period of time. However, if the fault condition remains, the unit will again be disabled and therefore require professional service.

### **Fuse Protection:**

A blown fuse in the VK-5 is an indication of a serious problem. If a replacement fuse fails as well, no further attempts should be undertaken. Please contact the factory for professional service.

The proper fuse ratings are as follows:

For 100-120 VAC Units: 2A 250V Slow Blow

For 200-240 VAC Units: 1A 250V Slow Blow

**Factory supplied fuses should be only replaced with the same type and rating parts.**

### **Servicing**

The Balanced Audio Technology VK-5 should require no service other than changing tubes to maintain its high performance. The vacuum tubes used in the VK-5 are quality 6922s and 5881s rated for approximately 5000 hours of use. Please direct any further service inquiries to the factory.

### **Cleaning**

To remove dust, occasionally wipe the front and top surfaces of your VK-5 with a damp soft cloth. If fingerprints appear, you may use a mild, non-alkaline soap solution. Do not use abrasive cleaners, as they may damage the fine finish of the unit.

# Five Year Limited Warranty

## Terms and Conditions

### 1. Limited Warranty

Upon receipt of the attached warranty registration form, Balanced Audio Technology warrants the purchased product to be free from manufacturing, materials, and workmanship defects for **five years** from date of original purchase, excepting vacuum tubes, subject to the following conditions. **Failure to return the enclosed registration form within 30 days from original purchase will result in a warranty period of one year from the date of manufacture.**

### 2. Vacuum Tubes

Vacuum tubes (including replacements under warranty) are warranted for one year from the date of the original VK-5 purchase.

### 3. Limited to Original Purchaser

This warranty is for the sole benefit of the original purchaser of the covered product, and may not be transferred to a subsequent purchaser of the product.

### 4. Conditions and Limitations

This warranty is subject to certain conditions and limitations, as follows. This warranty is void and inapplicable if the product has not been used in accordance with the instructions found elsewhere in this manual, or if it has been misused or abused, damaged by accident or neglect, or in transport once in possession of the purchaser. The warranty is also void if the product has been repaired, modified, or tampered with by anyone other than Balanced Audio Technology or its specifically authorized agents.

### 5. Remedy

If this product contains a materials, manufacturing, or workmanship defect that cannot be repaired at the dealership where the product was purchased, it must be packed in original packaging and returned to Balanced Audio Technology via insured freight, at the owners expense. If replacement packaging materials are required, they will be supplied by the factory at a nominal charge. **Returned products must be accompanied by a written description of the defect, and a return authorization number (available from the factory via phone or fax).** Upon receipt of defective product, Balanced Audio Technology agrees to repair the product without charge for parts (except vacuum tubes if the unit is more than one year old), or labor. The product will then be returned via prepaid, insured freight, with carrier at the sole determination of Balanced Audio Technology. This constitutes the purchasers sole remedy.

### 6. Design Changes

Balanced Audio Technology reserves the right to modify its products or change specifications at any time without obligation or liability to previous purchasers.

### 7. Miscellaneous

Any implied warranties relating to the above product shall be limited to the duration of this warranty. This warranty does not extend to any incidental or consequential costs or damages to the purchaser. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.