

User's Guide

bel canto



**Pre3<sup>TM</sup>**

**e.One<sup>TM</sup> Series**

Two Channel Analog  
Pre-Amplifier

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Thank you for purchasing the Bel Canto Design PRe3. Your PRe3 sets a benchmark for design, quality and sonic performance, continuing Bel Canto's heritage of musicality and realism.

# PRe3™

## Two-Channel Analog Pre-Amplifier

### T A B L E O F C O N T E N T S

Warranty .....	3
Unpacking .....	4
Power Connection .....	4
Initial Setup and Placement .....	5
Design Features .....	5
Control Functions .....	6 - 7
Remote Control .....	8
Conditioning .....	8
Front and Back Panels .....	9
Specifications .....	10

## Warranty Information

Please take a moment to fill out your warranty registration sheet. Returning this registration validates your warranty. This information will not be sold or released outside Bel Canto. Your comments and suggestions help us continue to improve upon our products and services.

Bel Canto products are automatically covered by a 90 day factory warranty. With no additional cost, you have the option to extend your warranty by completing and returning the enclosed warranty registration form within 30 days of purchase, along with a copy of the original sales receipt from an authorized Bel Canto dealer. This will ensure prompt warranty coverage. This warranty is only valid to the original

owner who has returned the warranty sheet along with a copy of the original sales receipt, covering all internal parts and workmanship. This warranty is void if damage is due to abuse, neglect, or unauthorized modification. The cost associated with the return of this unit is the sole responsibility of the owner.

Bel Canto products are uniquely identified with a serial number on the back panel of each unit. This number is required to validate your warranty. Please reference the serial number if service is required. If you have any questions, comments, or if we can be of service, please contact us Monday through Friday 9:00 a.m. - 5:00 p.m. CT/USA.

## Unpacking your PRe3

PRe3 box contents include the following:

- 1 (one) - PRe3 Preamplifier
- 1 (one) - PRe3 User's Guide
- 1 (one) - Power cord [6.6' - 2 meters long]
- 1 (one) - Remote Control
- 1 (one) - Warranty Sheet

Carefully unpack each piece and check for shipping damage. If there is any damage, or if anything is missing, please contact your dealer, distributor or Bel Canto Design.



**IMPORTANT:** Save all packing materials as the packing is specially designed to protect the unit during transportation or shipping. If the packaging becomes lost or damaged, please contact your dealer, distributor or Bel Canto before attempting to transport your unit.

## Power Connection

The power supply on the PRe3 is preset for the proper national voltage. The power cable should have the correct plug for your local power system. If you believe this to not be true, please contact your dealer immediately.



### Warning!

Do not connect power to this preamplifier yet!

This preamplifier, like any electrical component, can be dangerous and cause injury unless correct handling procedures are observed and used. Before powering this preamplifier it is necessary to read and follow proper setup and procedures.

## Placement and Initial Setup

Because the PRe3 runs cool it can be placed in many system locations without compromise. We do not recommend placing weights or other objects directly on the PRe3. This may mar or scratch the chassis finish. Do not use harsh chemicals when cleaning the outside of your PRe3.

Single Ended RCA and Balanced XLR connectors are available. XLR jacks allow balanced hookup using the standard North American pin configuration:

Pin 1	Ground
Pin 2	Input +
Pin 3	Input -



**IMPORTANT:** Make all connections before powering your unit.

## Design Features

The Bel Canto PRe3 represents a powerful statement in high performance audio control preamplifiers. Its superb audio performance and transparency renders it a modern standard in control preamplifier design:

- All analog, low noise, low distortion architecture for controlling up to six (6) 2-channel inputs including 1 balanced input
- Fully balanced XLR outputs for optimum interface to the power amplifier
- 4-layer PC board design for superior signal routing, grounding and power supply routing
- Latest generation of low-noise, low-distortion high speed audio buffers, level controls and output drivers provide superb measured and subjective audio quality
- Independent digital and analog transformers and multi-stage power supplies for precise power to the sensitive analog circuitry
- Precision audio grade resistors and no capacitors in the audio signal path
- Ultra low noise second stage regulation for the analog amplifier sections
- Home Theater Bypass mode on Input 5
- Digitally controlled analog volume control for optimum signal architecture
- New Single-Knob user interface provides simple, intuitive control function

## Front Panel Control Knob:

The control knob is a continuously rotating control with a push-switch function.

## Standby Mode:

Pressing and holding the control knob for 2 seconds will take the PRe3 out of Standby and in to operating mode. The unit will come up in a soft mute mode. The operating input will be indicated for several seconds and then it will go to the volume control mode. To place the PRe3 in Standby mode press and hold the control knob for 2 seconds.

## Volume Control Mode:

The PRe3 default operating mode allows you to change volume level by rotating the knob. The volume down function (counter-clockwise rotation) is very rapid and allows quick changes in the volume level. Volume up (clockwise rotation) functions rapidly up to a displayed volume level of 50.0. There is a pause at 50.0 until the display dims then the volume up function continues more slowly to a displayed value of 60.0 and then slower yet above 60.0. This operation makes it difficult to accidentally set a volume level that is too high.

## Input Selection Mode:

Pressing the control knob in briefly will toggle into the input selection mode. The selected input will be displayed for 5 seconds. During this time you can rotate the control knob to scroll to the desired input. Pressing the knob again will select the indicated input. The volume level will automatically ramp down and up during this selection process. If the control knob is not pressed for 5 seconds, the indicated input will automatically be selected and the PRe3 will return to the default volume control mode.

## Home Theater Bypass Operation:

Input 5 can be set to a home theater bypass mode (htb) that is used to pass the front left/right outputs from a multi-channel processor output through the PRe3 to the main L/R power amplifiers. ***This mode must be used with a preamp output which has volume control function as the PRe3 volume and mute controls will not function while the PRe3 remains in the htb unity gain setting.*** When in the Input Selection Mode, Input 5 can be toggled between the normal operating mode (In 5) and the bypass mode for (htb5) by pressing the control knob 2 times. You will note that the Input display will toggle between htb5 and In 5. The display simply reads htb (home theater bypass) when the bypass mode is active.

**Mute: (available only on the remote)**

The PRe3 starts up in Soft Mute. This level is 20dB below the displayed volume level. When MUTE is first pressed it goes to the Soft state, indicated by 2 decimal points on the volume display (i.e. 50.0.). Pressing MUTE again rapidly will fully MUTE the outputs. Full mute is indicated by 4 decimal points in the volume display (i.e. .5.0.0.).

**Pre In:**

This is used to toggle through the inputs, when initially pressed it will indicate the currently selected input.

**Standby:**

Used to toggle the PRe3 into and out of standby mode. Standby hard mutes the outputs while keeping all circuitry running, maintaining optimum circuit performance. Before unplugging the PRe3 from mains power it is recommended to place it in standby first. Standby is indicated by the presence of 2 dashes on the display - - .

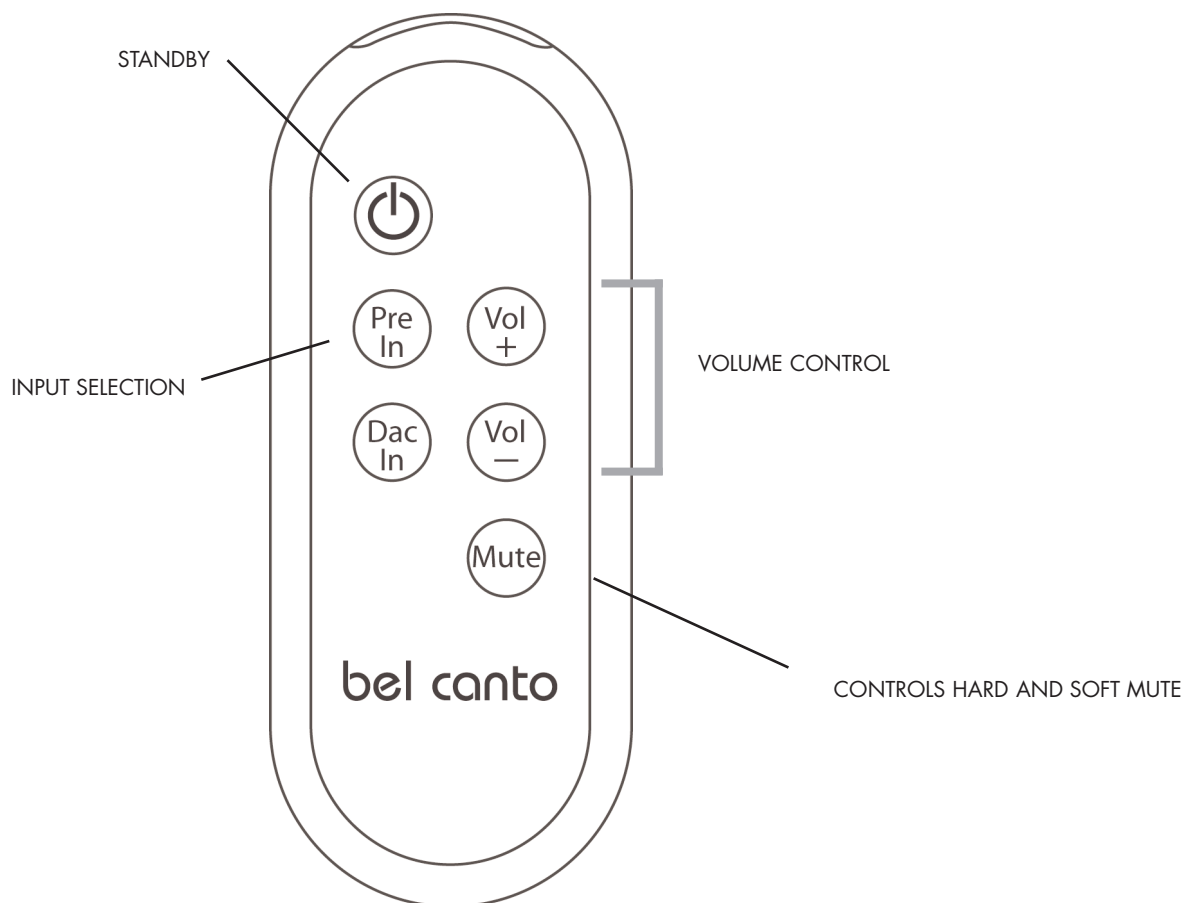
## Remote Control

### Volume Up:

Increases the output level in 0.5 Decibel (dB) steps over a range of 0.0 to 100.0.

### Volume Down:

Decreases the output level.



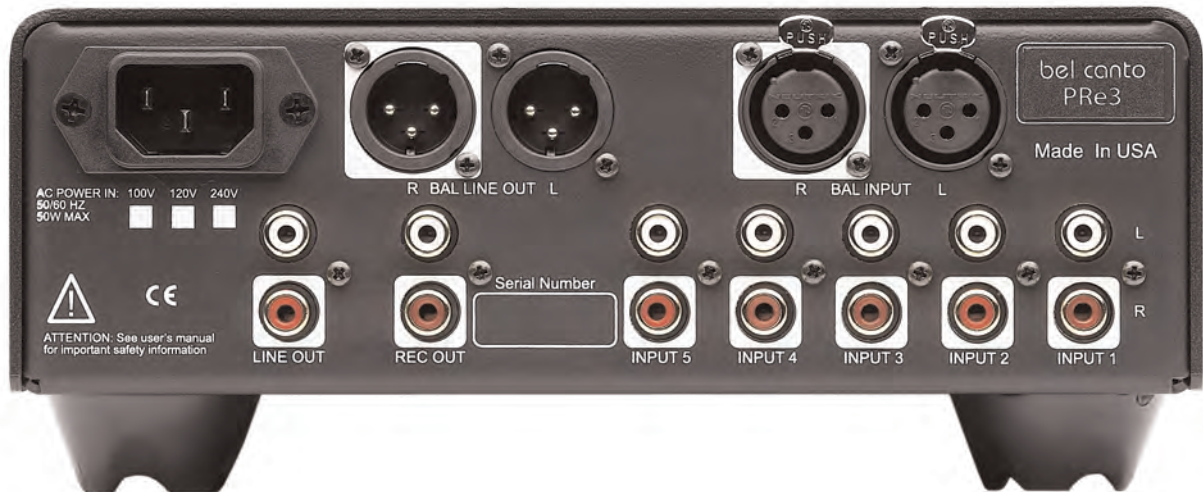
## Conditioning

The PRe3's sonic performance will start to stabilize after 100 hours of continuous power up.

## PRe3 Front Panel



## PRe3 Back Panel





## Pre3 Specifications

Bandwidth • DC-200KHz

Volume setting for unity gain • 80.0

Signal to Noise Ratio @ 2 Volt RMS • >105 dB A weighted, 20Hz-20kHz

Distortion @ 2 Volt RMS/1kHz • <0.001%

Dynamic Range • 120 dB

Input overload • 10 V RMS

Output Impedance • 500 Ohms Single Ended, 200 Ohms Balanced

Input Impedance • 10K Ohms Single Ended, 20K Ohms Balanced

Maximum Gain • 20dB/10X

Maximum Output Level • 9.5 V RMS

Idle power draw • 10 Watts

Power Requirements • 100-120 VAC 50-60 Hz or 220-240 VAC 50-60 Hz

Dimensions • 8.5" W x 12.5" D x 3" H (216 mm x 318 mm x 75 mm)

Weight: • 10lbs. (4.5 kg)

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