

User's Guide and Warranty Information

bel canto



PRe6™

**Multi-Channel Analog
Pre-Amplifier**

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Thank you for purchasing the Bel Canto Design PRe6. As the proud owner of a PRe6 you can expect high quality performance for years to come. The PRe6 presented in the following pages is designed to maintain very high value, setting the benchmark for design, quality and sonic accuracy while maintaining our heritage of musicality and realism.

PRe6TM

**Multi-Channel Analog
Control Pre-Amplifier**

Unpacking your new PRe6

PRe6 box contents include the following:

- 1 (one) - PRe6 Analog Preamplifier
- 1 (one) - PRe6 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 PRe6 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.

Complete and mail the Owner's Registration Sheet immediately in order to activate your warranty.

Placement and Initial Setup

Because the PRe6 runs so cool it can be placed in many system locations without compromise. We do not recommend placing weights or other objects directly on the PRe6. This may mar or scratch the chassis finish. Do not use harsh chemicals when cleaning the outside of your PRe6.



IMPORTANT: Make all connections before powering your unit.

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 -

Design Features

The Bel Canto PRe6 represents a new direction in audiophile grade control preamplifiers. Its unique and powerful dual zone and multi-channel options coupled with unequalled 2-channel audio performance define a new genre of control preamplifier:

- All analog, low noise, low distortion architecture for controlling 2 to 8 channel sources: 2-5.1/7.1 inputs, up to 12 2-channel inputs including 1-balanced input
- Fully balanced XLR outputs for driving up to 500 feet of interconnect
- Programmable options for inputs: function (5.1/7.1, stereo, disable), name, main level, zone 2 level and soft mute level
- 4-layer PC board design for optimum signal routing, grounding and power supply routing
- Latest generation of active audio buffers, level controls and output drivers provide superb measured and subjective audio quality

- Independent display/control and analog transformers and power supplies for optimum power isolation for sensitive analog circuitry
- Multi-stage power supply regulation for high isolation from power line effects
- Precision resistors and film capacitors in signal path
- RS232 port for integration with a system controller and for easy software updates
- Dual triggers for powering main 2-channel and surround amplifiers
- Independent Tape/Zone2 routing with buffered outputs
- Red/Green LED rear panel indicators to aid in system setup and cabling

Conditioning

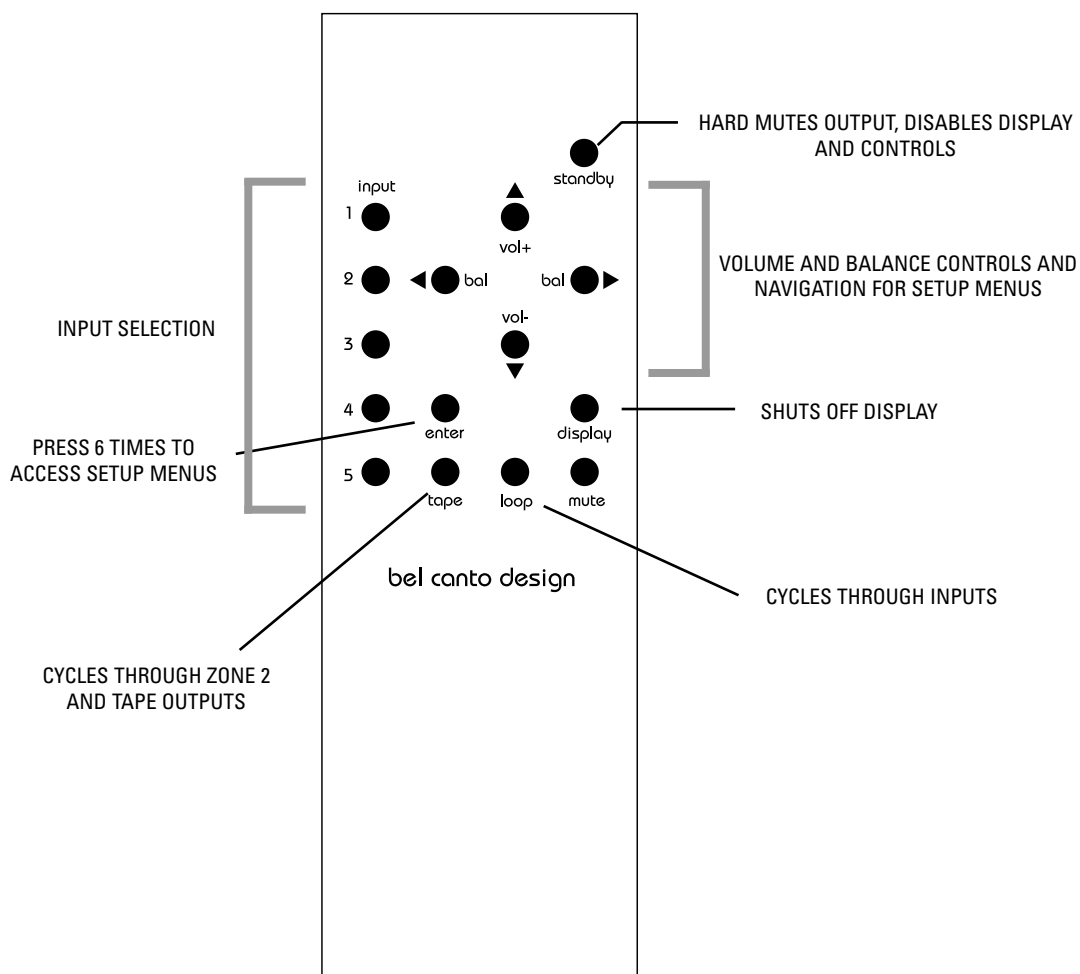
The PRe6's sonic performance will start to stabilize after approximately 40 hours of continuous power up.

Front Panel and Remote Control

Volume Up - Increases the output gain in 0.5 dB increments from 0 to 100, 100 being maximum gain. Unity gain is 84.0.

Volume Down - decreases the output gain in 0.5 dB decrements.

Balance Left - (available from the remote only) Shifts balance left in 0.5dB increments and reduces the volume in the opposite channel equally. Balance increment is visible on the left side of the display.



Balance Right - (available from the remote only) Shifts balance right in 0.5dB increments and reduces the volume in the opposite channel equally. Balance level is visible on the right side of the display.

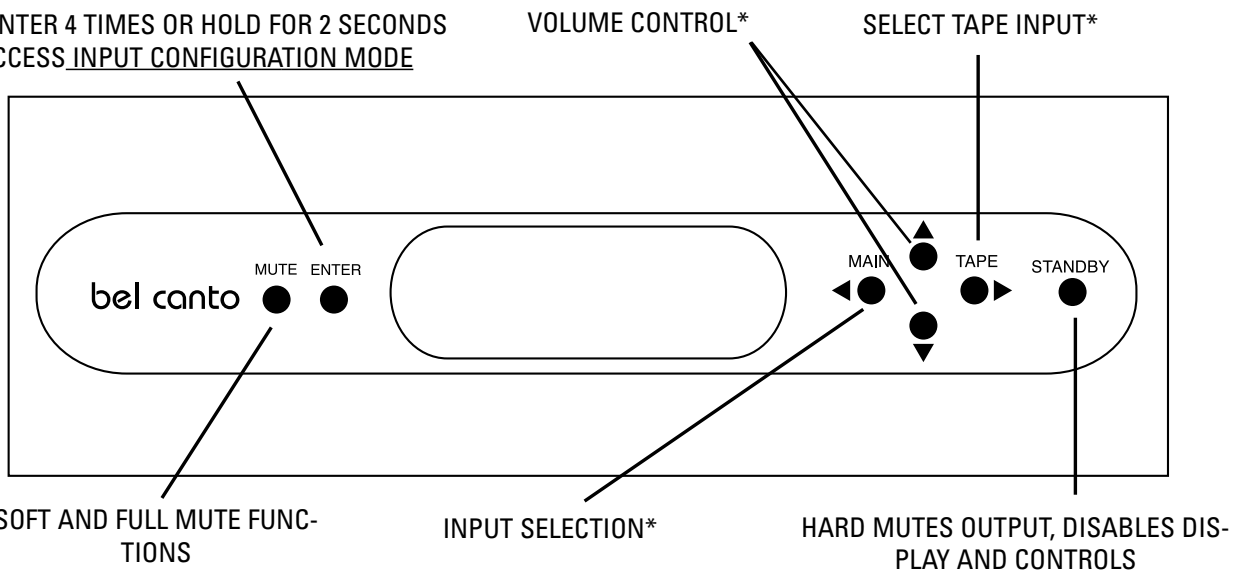
MUTE - When coming out of Standby the PRe6 starts in Soft Mute. This volume level can be adjusted in Configuration (of) Inputs. (This Soft mute level is shown as the number of decibels below the current listening level.) Pressing **MUTE** will first soft mute the unit. The volume quickly ramps down to the preset soft mute level and “**SOFT**” appears on the right side of the display. The volume can be lowered while in soft mute and then taken out of soft mute at the desired listening level. After 3 seconds from pressing **MUTE** (after the display dims), pressing **MUTE** again will bring the PRe6 out of Soft mute. Pressing **MUTE** twice within 3 seconds (before the display dims) will fully mute the unit. The volume quickly ramps down and “**MUTE**”

appears on the right side of the display. The listening level can again be lowered while muted and then taken out of mute at the desired level. Mute shuts off the audio output. Coming out of either mute mode, the volume quickly ramps back up to the displayed level.

MAIN – Cycles through inputs. On the remote, this is accomplished with the **LOOP** button

INPUT – On the remote, the input buttons allow you to select between the 1st five active inputs. From the remote, you can cycle through inputs using the **LOOP** button. From the front panel, you can cycle through inputs by pressing the **MAIN** button. When switching between inputs, the PRe6 will quickly ramp down the volume, switch inputs, then quickly ramp back up to the programmed volume setting. All inputs can be disabled if not used. See CONFIGURATION INPUTS section.

PRESS ENTER 4 TIMES OR HOLD FOR 2 SECONDS TO ACCESS INPUT CONFIGURATION MODE



*ALSO USED FOR NAVIGATION WHEN IN INPUT CONFIGURATION MODE

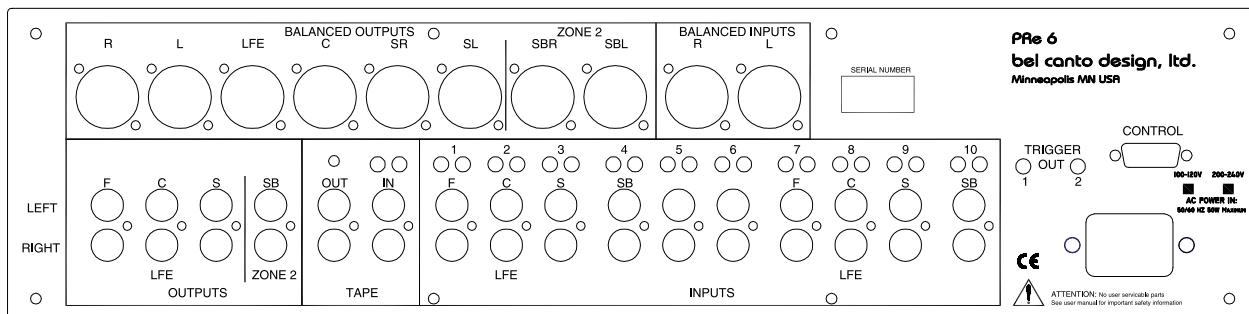
TAPE – On both the remote and the front panel, the **TAPE** button will cycle through the inputs, selecting the input to be routed to the Tape Out. If 7.1 Surround is not selected in Configuration Inputs, the two Surround Back (SB) (both XLR and RCA) channels will automatically be configured as **Zone 2** and routed along with the **Tape Output** selection (for further explanation on ZONE2, please see page 10).

NOTE: Tape Out and ZONE2 route the same input.

When the tape input of a tape deck is connected to the tape output of the PRe6, you may record any selected source (CD, Phono, Tuner, etc) except the TAPE input. When the tape output of a tape deck is connected to the **TAPE IN** of the PRe6 you may monitor your recording.

Standby - When in standby mode the red LED is engaged and audio output is hard muted. Most internal circuitry is active while muting the output and turning off the display and controls.

Back Panel Configuration



PRe6 Setup and Options

Factory Configuration:

The PRe6 has the following factory input settings:

Input 1: 5.1 Surround
Input 4, 5 and 6: Stereo
Input 7: 5.1 Surround
Input 10: Stereo
Input 11: Stereo
TAPE: Stereo

Modifying Factory Configuration:

Press the **ENTER** button on the remote eight times or press and hold the **ENTER** button on the front panel for two seconds to engage **Configuration Mode**.

Configuration Mode allows you to customize individual inputs/channels. Navigation is accomplished with the **UP** and **DOWN** and down arrow button to select menu options, and the **RIGHT** and **LEFT** arrow buttons to select the input you wish to change (See pages 10-14). If you are called away for more than 30 seconds while in Input Configuration mode, the unit will exit Input Configuration mode. Your changes will remain in memory (but won't take affect) until either the unit is shut off (deleting the changes) or you reenter Input Configuration mode and finish your adjustments, then **SAVE** (see below).

Top Level Menu

The **Top Level** menu screen has four options selectable using the right/left

arrow buttons: **CONFIGURATION (of) INPUTS**, **CONFIGURATION (of) OFFSETS**, **SAVE CONFIG?** and **ERASE CONFIG?**.

CONFIGURATION (of) INPUTS:

Using the down arrow button, **CONFIGURATION (of) INPUTS** menu allows you to customize your PRe6 in the following ways: Define Input (5.1, 7.1, Stereo, Disable), Name Input, Set MAIN Volume, Set SoftMute Vol(ume), Set Zone2 Volume. Press **ENTER** to edit a given setting, adjust setting using the **UP** and **DOWN** arrow buttons and press **ENTER** again to exit edit mode.

CONFIGURATION (of) OFFSETS:

The **CONFIGURATION OFFSETS** menu allows for adjustment of the Surround Sound speaker levels. The **RIGHT** and **LEFT** arrow buttons allow you to select either Surround Input. As you press the down arrow button, selection options are: **Center**, **LFE-Sub**, **Left Surround**, **Right Surround**. If 7.1 Surround is enabled, **Sur Left Back** and **Sur Right Back** will also be available. Surround levels can be adjusted +10 to -20 dB in relation to the front main speakers. Press **ENTER** to edit a given setting, adjust setting using the **UP** and **DOWN** arrow buttons and press **ENTER** again to exit edit mode.

SAVE CONFIG ?

After you have edited your settings, you must **SAVE** your settings by using the **UP** or **DOWN** arrow keys in the **SAVE CONFIG?** screen. Or you can press **ENTER** at the Configuration Input screen, which will bring you to the **SAVE CONFIG?** screen, then use the **UP/DOWN** arrow buttons to select **SAVE YES/NO** and then press **ENTER**.

ERASE CONFIG ?

This will reset your PRe6 to the factory settings, use the **UP/DOWN** arrow buttons to select **ERASE YES/NO** and then press **ENTER**.

CONFIGURATION (of) INPUTS

Define Inputs:

The input definition screen allows you to set up and assign all available inputs. Using the **RIGHT** and **LEFT** arrow keys allows you to cycle through all available inputs.

Available inputs will depend on Surround Sound modes chosen. Inputs 1 and 7 can be configured for multi-channel use, either 5.1 or 7.1, in addition to Stereo or Disabled. Surround Sound modes make use of adjacent inputs on the back panel as necessary.

For instance: If you set Input 1 to 7.1 Surround, Input 1 now controls Inputs 1, 2, 3 and 4. When you define Input as a Surround format, inputs 2, 3 (and 4 if you chose 7.1 surround) will no longer be available separately

and will be skipped when cycling through inputs, as they now are defined as being part of Input 1. On the back panel of the unit, these numbered inputs are also labeled according to their Surround Speaker: Input 1 - F for Front left and right. Input 2 - C for center and LFE for sub-woofer. Input 3 - S for surrounds and Input 4 - SB for Surround Back. You will notice that inputs 6-9 follow a similar format. Green LEDs on the back panel show which inputs are selected to aid in cable connection.

Disable:

When cycling through inputs from both the front panel and remote, selecting **DISABLE** deactivates an input and removes it from the menu.

Edit Input Name:

Input selections can be labeled with up to 8 characters consisting of upper and lower case letters, a space and numbers 0-9. Press **ENTER** to edit Input Name. A cursor will appear. Use the **RIGHT** and **LEFT** arrow buttons to move cursor. Use the **UP** and **DOWN** arrow buttons to select the letters and numbers of your choice. Press **ENTER** again to exit Edit mode.

Set MAIN Volume:

Each individual input can be adjusted in .5 dB steps to match levels from various source components when selected (factory default is 65). Use

the **RIGHT** and **LEFT** arrow keys to select the desired input and then press **ENTER** to adjust level. Use the **UP** and **DOWN** arrow keys to adjust volume level accordingly and press **ENTER** again to exit.

Set Soft Mute Offset:

The volume level for Soft Mute is preset to - 20 dB below the current volume level. Press **ENTER** to adjust the desired input. Use the **UP** and **DOWN** arrow keys to adjust setting preferences and press **ENTER** again to exit.

Set Zone 2 volume:

Located at the bottom most Configuration Input screen, you will find Zone 2 volume settings. ZONE 2 has been preset to 65.0. Press **ENTER** to edit volume level using the **UP** and **DOWN** arrow keys. Press **ENTER** again to exit Zone 2 volume level edit mode.

Zone 2 Function

When a 7.1 input is not enabled in Configuration Inputs, the SB (Surround Back) outputs (both RCA and XLR) are used as an additional *volume controlled* output for use in a second zone. If you have an external volume control for your second zone, adjust Zone 2 volume level to 84.0 (unity gain) for proper output to Zone 2. Input selection for Zone 2 is accomplished using the **TAPE** button found on both the remote and front panel. The red LEDs on the back panel will indicate which source is selected for TAPE/Zone 2 for output (XLR and RCA). As you continue to press the **TAPE** button, the display will cycle through the various inputs that will be routed to the TAPE/Zone 2 output.

Specifications

Bandwidth Into >600 Ohms: DC-200KHz
Volume setting for unity gain • 84.0
Signal to Noise Ratio @ 2 Volt RMS • >100 dB A weighted, 20Hz-20kHz
Distortion @ 2 Volt RMS/ 1kHz <0.005%
Input overload: 10 V RMS
Output Impedance: 10 Ohms
Input Impedance: 20K Ohms
Gain: 16dB
Maximum Output Level: 10 V RMS
Idle power draw • 21 Watts
Power Requirements • 110-120 VAC 50-60 Hz or 220-240 VAC 50-60 Hz
Dimensions • 17.5" W x 14.5" D x 4.5" H (445 mm x 368 mm x 114 mm)
Weight: 24lbs. (13 kg)

PRE6 Offset Configuration

7.1 Configuration

Press Enter Button for 2 Seconds
or Remote Enter Button 8 Times

Press Enter To Edit Any Screen

Configuration
Inputs

Press
LEFT/RIGHT
Button

Configuration Offset?

Press
LEFT/RIGHT
Button

Save Config?
No

Press
LEFT/RIGHT
Button

Erase Config?
No

Press UP/DOWN Button

Press UP/DOWN Button

Press UP/DOWN Button

Press UP/DOWN Button

IN 1: Input 1
5.1 SURROUND

Press
LEFT/RIGHT
Button

Save Config?
Yes

Press
LEFT/RIGHT
Button

Erase Config
Yes

Press UP/DOWN Button

Center
Input: 1: 0.0

Press UP/DOWN Button

Subwoofer
Input: 1: 0.0

Press UP/DOWN Button

Left Surround
Input: 1: 0.0

Press UP/DOWN Button

Right Surround
Input: 1: 0.0

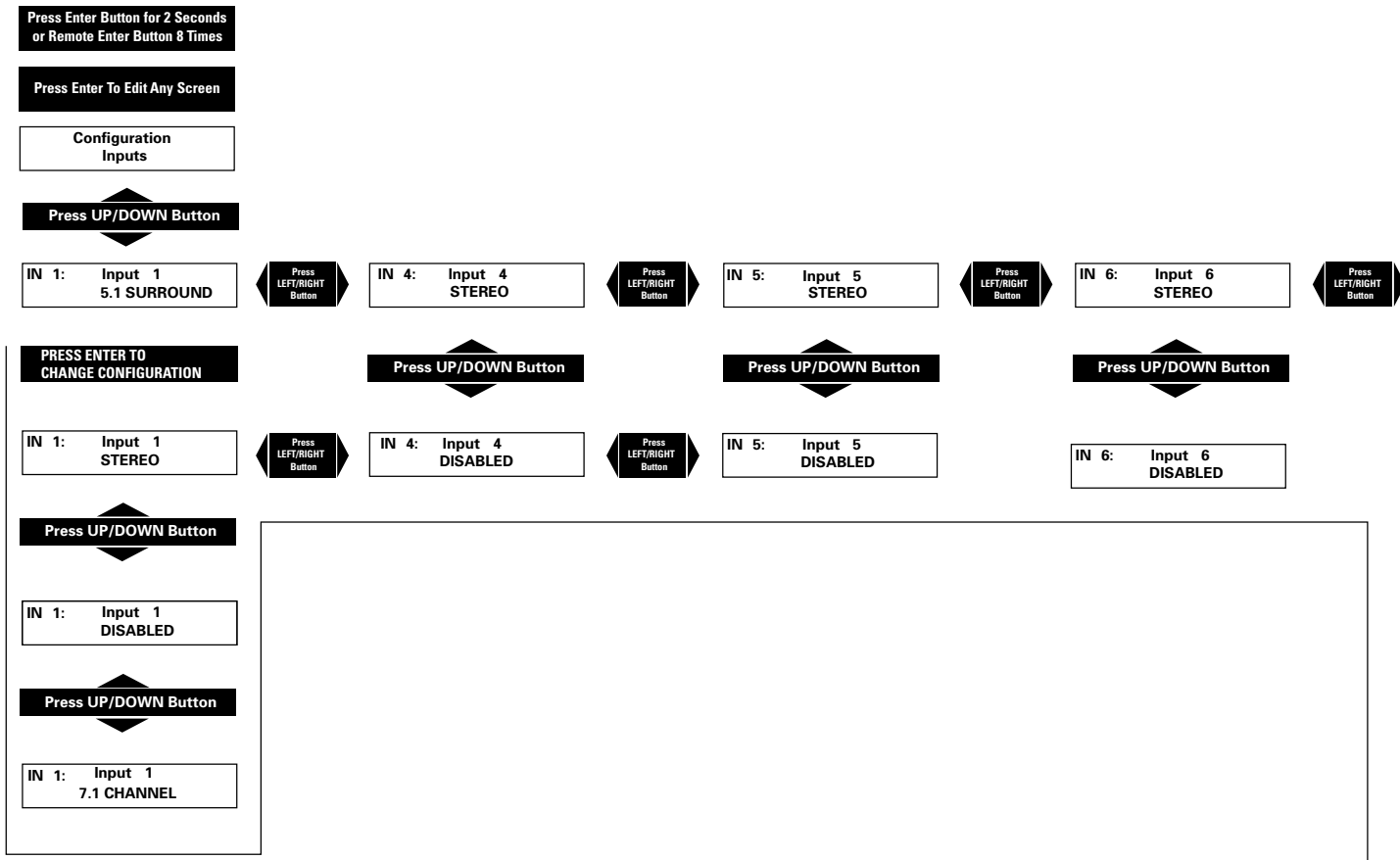
Press UP/DOWN Button

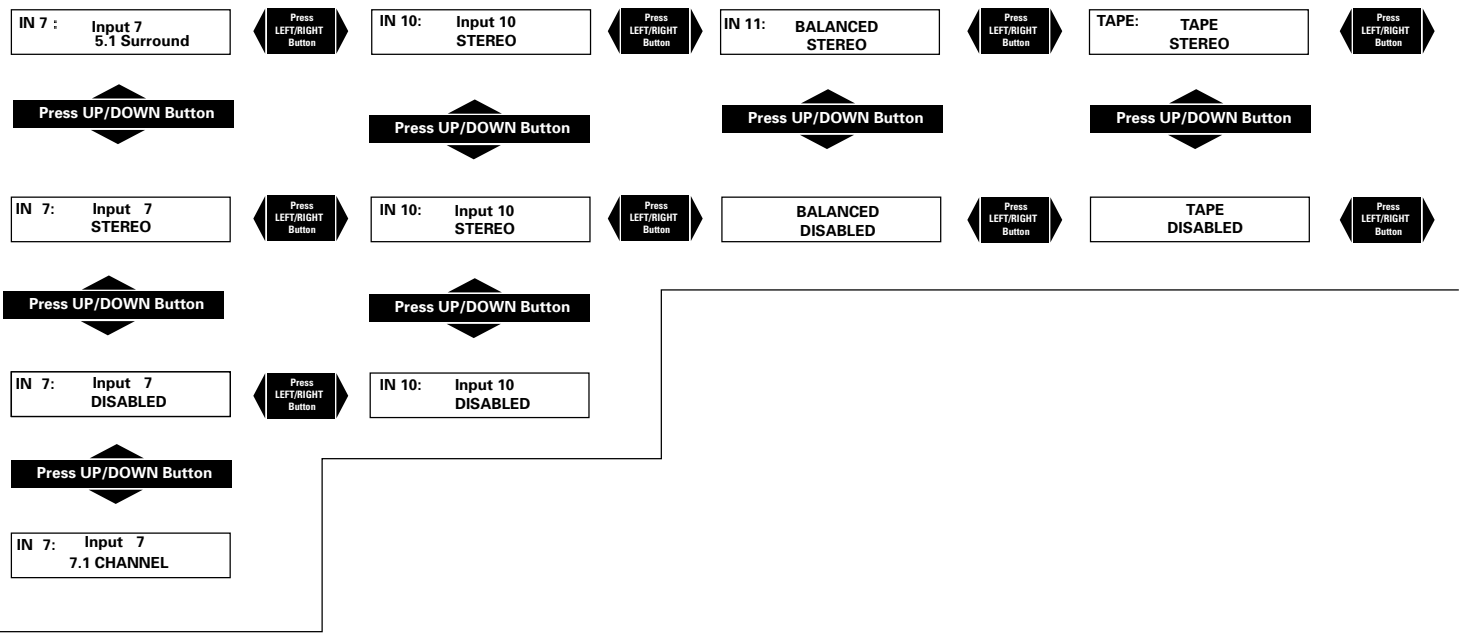
Sur Back Left
Input: 1: 0.0

Press UP/DOWN Button

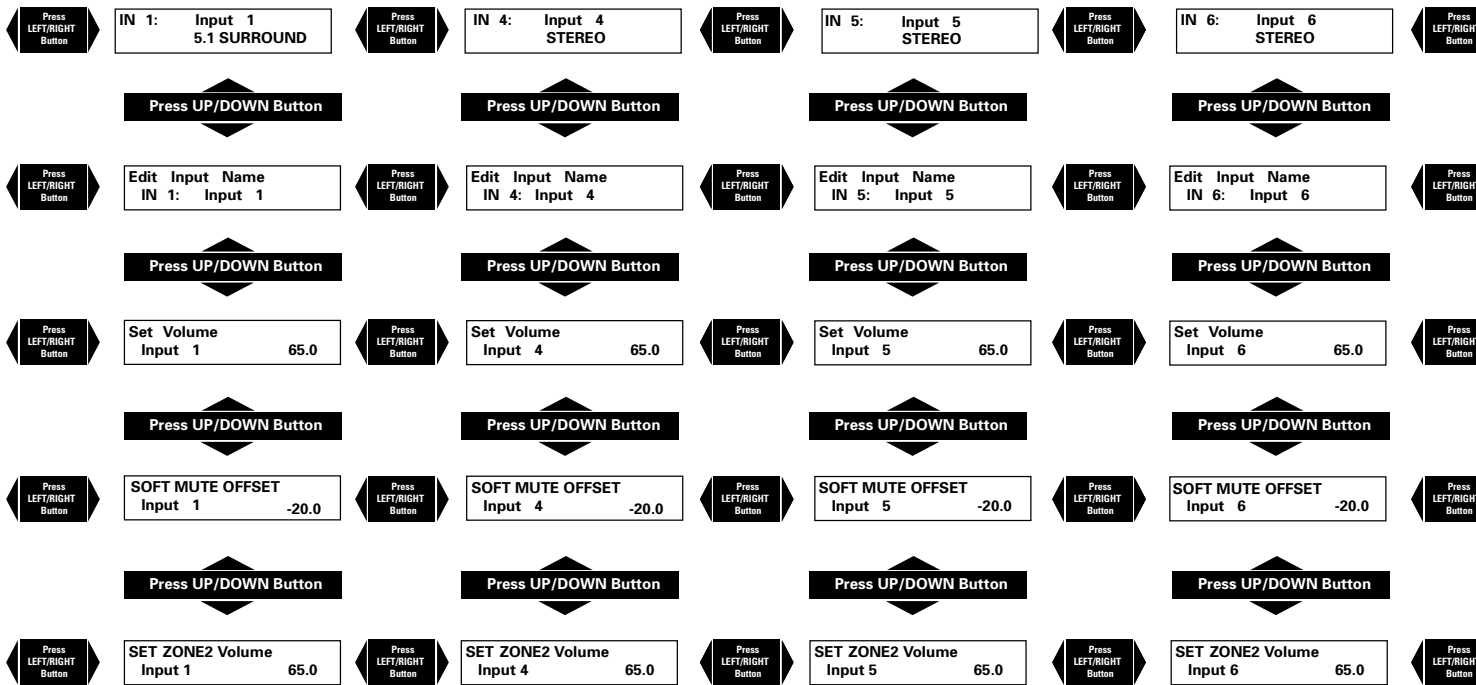
Sur Back Right
Input: 1: 0.0

PRe6 Input Configuration Map





Factory Settings Map





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