PSP810 Powered Subwoofer
Owner's Manual

SUPERIOR LISTENING SYSTEMS
AUDIO CLARITY REDEFINED

Rev: 002

1650 W. Jackson Ozark, MO 65721 (417) 883-4549

1. Important Safety Instructions

1.1 CAUTION

To reduce the risk of electric shock, do not remove the back panel of the PSP810 There are no user-serviceable parts inside. Refer servicing to SLS Loudspeakers or qualified personnel.

1.2 General Safety

1.2.1 Read and follow all warnings, operating and safety instructions in this manual and on the unit.

1.2.2 Do not use the PSP810 near bathtubs, sinks, swimming pools, or other locations where water is present.

1.2.3 The speakers should be positioned firmly on a level surface. Make sure that the supporting object can handle the load weight of the PSP810.

1.2.4 The line voltage selection switch must be set for the correct AC voltage present in the region of use (115VAC or 230VAC). Operating the speaker outside these voltages or opposite of the selector switch setting may damage the electronics.

1.2.5 For continued protection against risk of fire, replace only with same type of fuse and rating for operational voltage selection.

1.2.6 Do not place the PSP810 near heat sources such as stoves, heat registers, radiators, or other appliances that produce heat.

1.2.7 Power supply cords should be placed so that they will not be pinched by objects being placed on or against them.

1.2.8 During extended periods of non-use, the power cord should be unplugged from the outlet.

1.2.9 Do not expose the PSP810 to rain or moisture. Fire or electrical shock may result.

1.3 Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

2. Introduction

2.1 Welcome to SLS

Thank you for choosing SLS Loudspeakers! SLS Loudspeakers is a leader in digital amplification and ribbon technology allowing for a new level of sound reproduction, clarity, and definition. Should you need to contact SLS you can visit our website at www.slsaudio.com or contact our headquarters:

SLS Loudspeakers
1650 W. Jackson
Ozark, MO 65721
417-883-4549

2.2 Proprietary Technology

Various technologies and components within the PSP810 are proprietary to SLS and protected under letters patent.

2.3 Unpacking

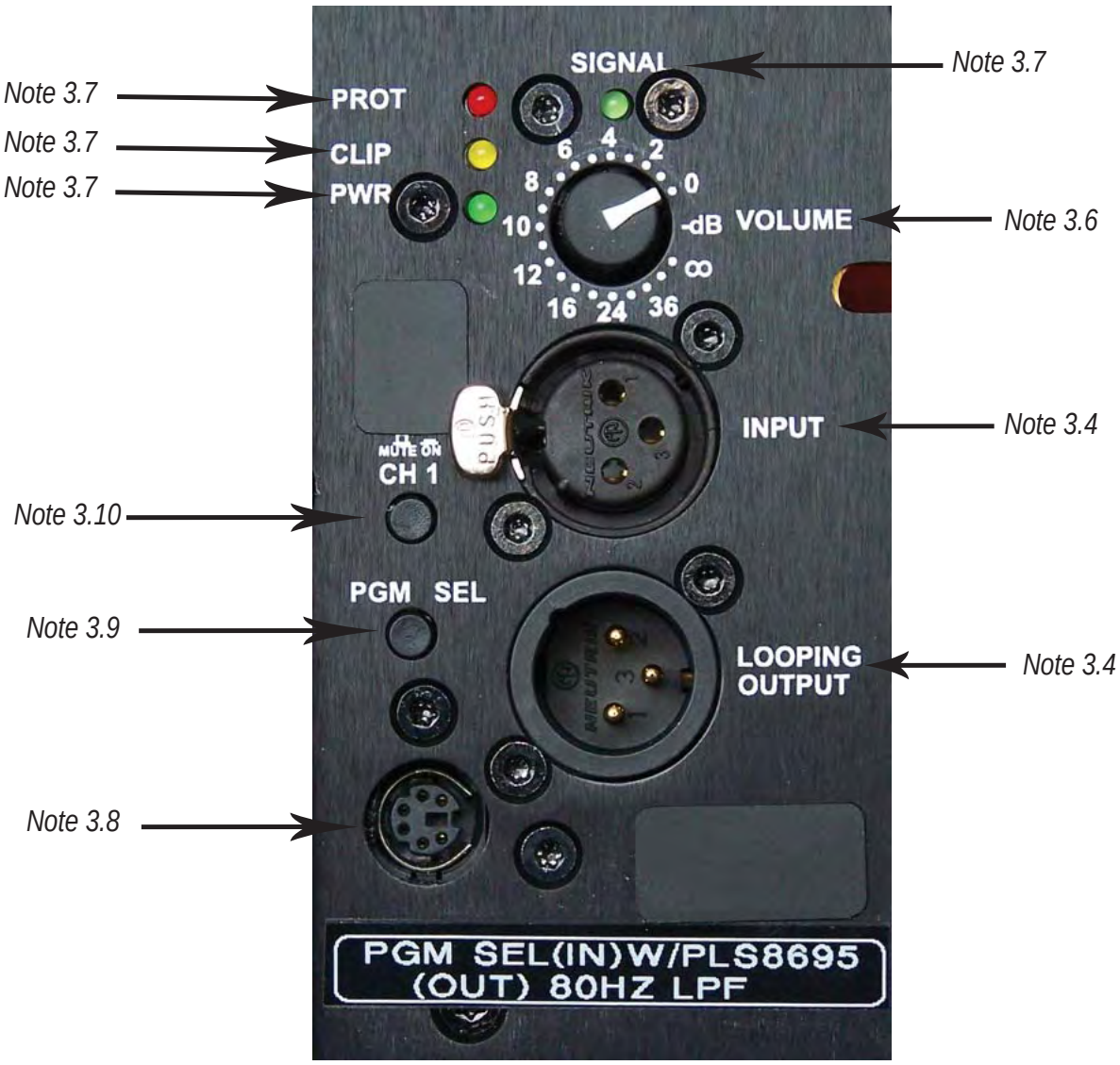
The PSP810 loudspeakers are individually shipped in heavy-duty cardboard boxes and are protected inside by foam packing material.

Step 1: Cut sealing tape on bottom or top end, fold the carton flaps back and invert box and contents.
Step 2: Lift the carton carefully clear of inner contents.
Note: do not cut through carton with sharp objects, as you might damage cabinet finish.

We suggest you retain the packaging for possible future use

3. General Use and Operation

3.1 Back Panel



3.2 Positioning

The PSP810 is specifically designed to serve as a platform for one or two stacked PLS8695v2. Make sure that the subwoofer is placed on a stable flat surface to prevent the stack from sliding or tipping over.

3.3 AC Mains Connection

The AC mains power cord is connected to the front panel through the blue Neutrik Powercon. The mating cable end connector is a Neutrik NAC3FCA. The grey Powercon connector is a power outlet that allows looping to adjacent PLS8695v2 units or additional PSP810's. The looping outlet mating cable connector is a Neutrik NAC3FCB. Up to two amplifiers can be used on a single 20 amp circuit.

3.4 Audio Connection

The PSP810 accepts a balanced audio signal at the XLR audio input connector located on the back panel. Pin 2 is high signal. The input is transformer balanced with an input impedance of 15K Ohms. Connect an appropriate XLR cable between an audio source (mixer, processor, etc.) to the balanced input connector. Unbalanced connections can be accomplished by grounding pin 3 of the XLR audio input connector through the use of an appropriate adapter or cable. A buffered loop output is provided for PLS8695v2's and/or additional PSP810's.

3.5 Power Connection

Prior to connecting the power cord and turning on the amplifier, always verify the line voltage selection switch is set for the correct AC voltage present in the region of use. The PSP810 is designed to operate on either 115VAC or 230VAC by using the line voltage selection switch. Damage may occur to the electronics if the speaker is powered up with the line voltage selector switch in the incorrect position. Once set to the proper range, the amplifier will regulate the internal voltages so that output power does not change with supply voltage.

3.6 Audio Level Control

The PSP810 is equipped with a detented audio level control for use in setting the overall audio level. Set this control to the desired position based upon the nominal gain structure desired. It is recommended to match the knob settings on attached PLS8695v2's when used in this configuration.

3.7 Status Indicators

"CLIP" indicates when Channel 1 is clipping. "PROT" indicates when the power supply protective circuitry has been engaged. It may be necessary to cycle the power to reset the protective circuitry. "PWR" indicates that power is present in the amplifier. "SIGNAL" indicates that signal is present at the input of the amplifier.

3.8 Programming Port

This port is used by SLS to program the EEPROM for DSP processing data. It requires a proprietary interface and is not user assessable.

3.9 Programming Selection

This switch allows the selection between the two DSP settings stored in the internal memory. The "in" position is for use with the PLS8692v2 only (a 24dB LP Butterworth filter at 120Hz). The "out" position puts a 24dB LP Butterworth filter at 80Hz for general purpose use. ***These settings are "boot up" enabled only so in order to make the change, power off the PSP810, select the opposite button position and re-power.*** It will then boot up in the desired DSP mode.

3.10 Mute Switches (in - signal passes, out - muted)*

These switches mute the individual amplifier channels for setup and troubleshooting purposes.

* Buttons are reversed from typical settings to protect them from damage when they are in typical positions.

4. Specifications

Product Specifications	
Operating Range [1]	33Hz - 120Hz
Input Sensitivity	1.88V RMS
Max SPL (calculated) @ 1 Meter	132dB
Amplifier Power	1000 Watts
120V AC Power Consumption	10.4 amps at full rated RMS output 1.5 amps at 1/8 power (180 Watts)
Transducers	2 x 18" Woofers
Input	XLR with buffered loop through
Dimensions	25.5" (64.8cm) H 38" (96.5cm) W 37.5" (95.3cm) D
Enclosure	13ply Baltic Birch
Weight	200lbs (90.7kg) Shipping 280lbs (127kg)
Rigging	Built-in attachment points for PLS8695v2
Finish Options	Black Latex

1. LF at -10dB