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# PLS8695v2 Powered True Line Source Array Owner's Manual



**SUPERIOR LISTENING SYSTEMS**  
AUDIO CLARITY REDEFINED



## 1. Important Safety Instructions

### 1.1 CAUTION



To reduce the risk of electric shock, do not remove the back panel of the PLS8695v2. 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 PLS8695v2 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 PLS8695v2.
- 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 PLS8695v2 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 PLS8695v2 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](http://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 PLS8695v2 are proprietary to SLS and protected under letters patent.

### 2.3 Unpacking

The PLS8695v2 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.

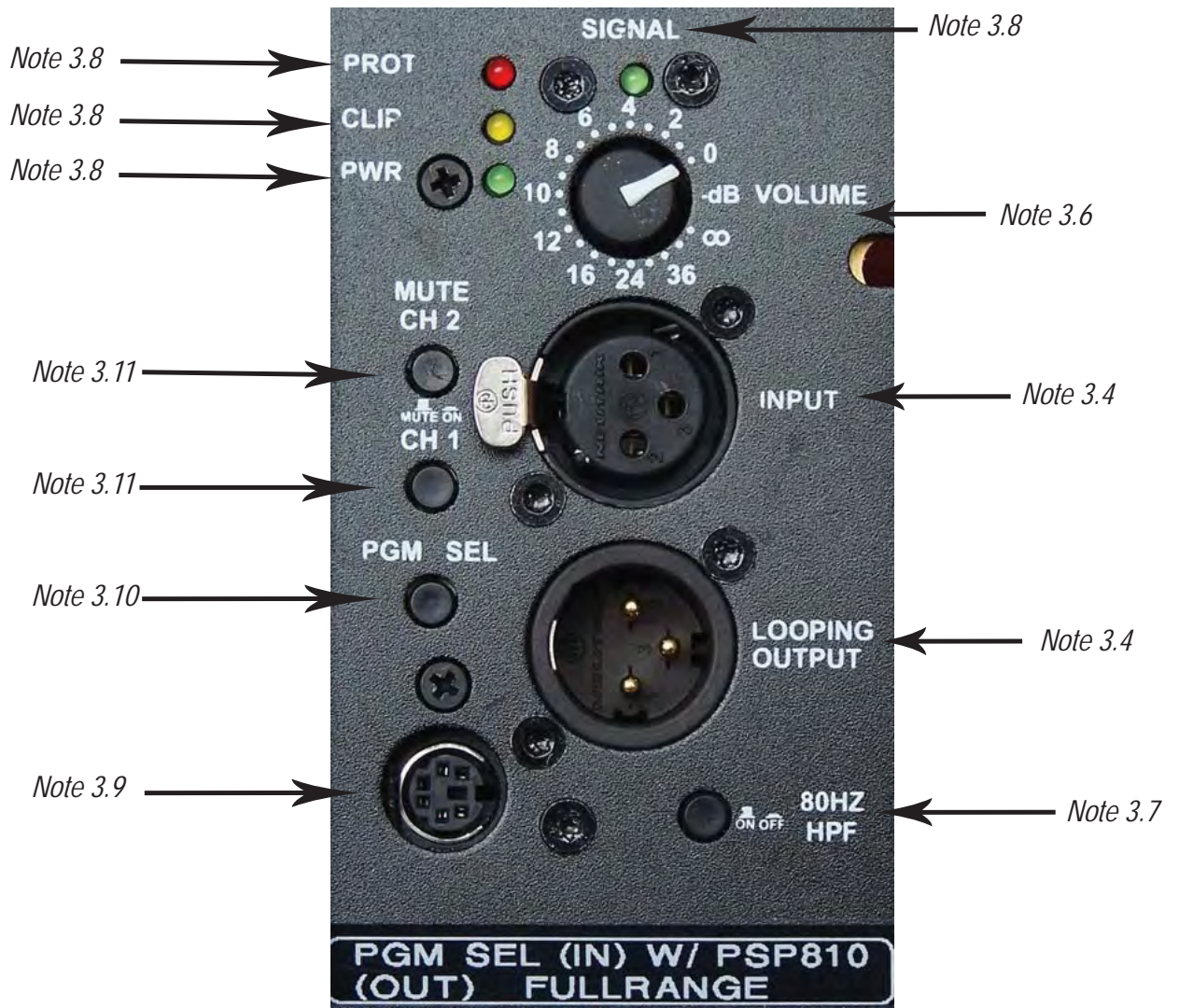
Note: do not cut through carton with sharp objects, as you might damage cabinet finish.

We suggest you retain the packaging for possible future use



### 3. General Use and Operation

#### 3.1 Back Panel





### 3.2 Positioning

The PLS8695v2 has a very defined vertical dispersion, which helps prevent interaction with the floor and ceiling and extends the nearfield listening area. It is important to set the speaker so the bottom of the box is approximately at chest height of the first listeners. The speaker may be tilted for proper positioning relative to the coverage area. It is highly recommended that our free LASS aiming software be used to set the position and angle of the PLS8695v2(s).

### 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 PLS8695's. The looping outlet mating cable connector is a Neutrik NAC3FCB. Up to (2) PLS8695v2's can be used on a single 20 amp circuit.

### 3.4 Audio Connection

The PLS8695v2 accepts a balanced audio signal at the XLR audio input connector located on the back panel. Pin 3 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 2 or 3 of the XLR audio input connector through the use of an appropriate adapter or cable. A buffered loop output is provided for additional PLS8695v2s and/or the PSP810 companion subwoofer.

### 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 PLS8695v2 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 PLS8695v2 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.

### 3.7 80Hz High Pass Filter (in - disabled; out - enabled)\*

The PLS8695v2 is equipped with an 80Hz 2nd-order Butterworth high pass filter for use in applications having a subwoofer (not for use with the PSP810) or for restricting the low frequencies in speech only systems. The filter may be enabled or disabled by using the 80Hz HPF switch located on the back panel.



### 3.8 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.

### 3.9 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.

### 3.10 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 PSP810 only (a 24dB Butterworth filter at 120Hz). The "out" position is for fullrange general purpose use. *These settings are "boot up" enabled only so in order to make the change, power off the PLS8695v2, select the opposite button position and re-power.* It will then boot up in the desired DSP mode.

### 3.11 Mute Switches (in - signal passes, out - muted)\*

These switches mute the individual amplifier channels for setup and troubleshooting purposes. Ch. 1 is LF, Ch. 2 is HF.

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

## 4. Specifications

Product Specifications	
Operating Range <sup>1</sup>	70Hz - 20,000Hz
Horizontal Coverage Angle -6dB <sup>2</sup>	120 Degrees
Vertical Coverage Angle -6dB	Defined by the height of the array
Input Sensitivity	1.88V RMS
Max SPL (calculated) @ 1 Meter <sup>3</sup>	130dB Peak
Amplifier Power Low Freq.	1000 Watts
Amplifier Power High Freq.	500 Watts
120V AC Power Consumption	10.4 amps at full rated RMS output 2 amps at 1/8 power (245 Watts)
Crossover Frequency	Internal DSP
Transducers - Low Freq.	6.5" Woofers x 8
High Freq.	PRD500 Ribbons x 9
Input	XLR with buffered loop through
Dimensions	55.16" (140cm) H 11.5" (29.2cm) W 11" (28cm) D
Enclosure	13ply Baltic Birch
Weight	110lbs (50kg) Shipping 135lbs (61.2kg)
Rigging	16 Points 3/8" threaded inserts
Finish Options	Black Latex White Latex Paintable Natural Finish

1. LF at -10dB, HF -6dB at 40kHz on-axis however response above 20kHz is limited by air absorption and DSP sampling rates in typical PA applications.

2. Averaged from 1000Hz to 10kHz

3. Typical SPL for one box only, for array SPL refer to LASS calculations.