



The SPM412e Stereo Preamp/Mixer provides four stereo line inputs, one mic/line input, and two independent outputs. With input source selection, automatic page-over muting, and remote control functions, the SPM412e is ideally suited for applications such as restaurants, bars, meeting rooms, aerobics studios, and school gymnasiums. The SPM412e is extremely versatile, yet cost-effective, and is easy to install and operate.

### FEATURES

- four stereo line inputs with trim controls & RCA connectors
- balanced mic/line input on plug-in barrier connector
- trim, pad, peak LED & level control on the mic/line input
- +24 volt phantom power switchable on the mic/line input
- balanced stereo main output on plug-in barrier connector
- balanced mono zone output on plug-in barrier connector
- front panel push-buttons select stereo inputs & adjust level
- simultaneous selection of multiple inputs from front panel
- front panel LEDs show stereo input selections & main level
- treble, bass, and balance controls for the stereo main output
- rear panel switch defeats treble/bass at stereo main output
- rear panel switch converts the stereo main output to mono
- limiter with threshold control for the stereo main output
- front panel rotary level control for the mono zone output
- automatic talkover muting when the mic/line input is in use
- internal jumpers assign mic/line in pre or post treble & bass
- internal jumpers assign mic/line input pre or post main level
- internal jumpers assign mic/line input to main and/or zone
- internal jumpers assign stereo inputs to main and/or zone
- internal jumpers assign talkover muting to main and/or zone
- internal talkover muting adjustment for both main and zone
- infrared, wall-mount, custom, or third-party remote controls
- wall-mount 'Controller' overrides front panel commands
- remote control affects stereo input selection & main level
- default settings can be established for recall at power-up
- incorporates **AES** recommended grounding practices
- **CE** marked and **UL / C-UL** listed power source
- covered by Biamp Systems' five-year warranty

### ARCHITECTS & ENGINEERS SPECIFICATION

The stereo preamp/mixer shall provide four unbalanced stereo line inputs and one differentially balanced mono mic/line input. Each stereo line input shall include a rear panel screwdriver adjustable level control, and shall be capable of accepting either -10dB or +4dB signals. Stereo line inputs 1-4 shall be provided on female RCA connectors. Four front panel push-buttons, with associated LED indicators, shall allow selection of stereo line input signals. The mic/line input shall have 60dB of gain, and shall include a rear panel screwdriver adjustable 40dB trim control, a 30dB pad switch, a peak indicator, and a front panel rotary level control. The input shall be able to accept low-impedance microphone signals or line-level signals. A rear panel switch shall activate +24 volt phantom power for condenser microphones. The mic/line input shall be provided on a plug-in barrier strip, with additional screw terminals available to program talkover muting of the stereo line signals. Talkover muting may be triggered either by an external switch or by signal present at the mic/line input.

A balanced stereo main output and a balanced mono zone output shall be provided on plug-in barrier strips. The stereo main output shall include front panel rotary controls for bass, treble, and balance, with three front panel push-buttons providing level up, level down and mute functions. Nine front panel LED indicators shall display the relative level setting. A stereo main output limiter circuit shall include a screwdriver adjustable rear panel threshold control and an LED indicator. Rear panel switches shall allow the stereo main output to operate in mono, and the treble & bass controls to be defeated. The mono zone output shall include a front panel rotary level control. Internal jumpers shall allow mic/line input and stereo line input signals, as well as talkover muting, to be assigned to the stereo main and/or mono zone outputs. Internal trim controls and jumpers shall allow talkover muting levels to be adjusted independently for the stereo main and mono zone outputs. Internal jumpers shall assign mic/line input signal pre or post treble & bass, and pre or post main level.

Optional remote control, by infrared transmitter, wall-mount panel, custom panel, or third-party controllers, shall affect stereo line input selection and stereo main level/mute functions. Wall-mount Controller shall override front panel control. Remote controls may be wired up to 2000 feet from the preamp/mixer, and the infrared transmitter shall operate up to 30 feet from the wall-mount panel. Default power-up settings shall be programmable for sources & level.

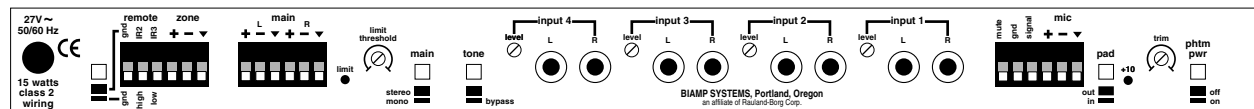
The stereo preamp/mixer shall have a Frequency Response of +0/-0.5dB from 20Hz to 20kHz at +4dBu. THD + Noise shall be less than 0.1% from 20Hz to 20kHz at +4dBu. Output Noise shall be less than -85dBu from 20Hz to 20kHz at nominal levels. Microphone Equivalent Input Noise shall be less than -125dBu. Power Consumption shall be less than 10 Watts. Dimensions shall be 1.75" H x 19" W x 7.25" D. Weight shall be 6 lbs. Warranty shall be 5 years. The unit shall be CE marked with a UL / C-UL listed power source, and shall incorporate AES recommended grounding practices.

The stereo preamp/mixer shall be a BIAMP SPM412e.

## SPM412e SPECIFICATIONS

<b>Frequency Response</b> (20Hz~20kHz @ +4dBu):	+0/-0.5dB	<b>Output Impedance:</b>	
<b>THD+Noise</b> (20Hz~20kHz @ +4dBu):	< 0.1%	main output (balanced)	200 ohms
<b>Output Noise</b> (20Hz~20kHz @ nominal levels):	< -85dBu	zone output (balanced)	200 ohms
<b>Equivalent Input Noise</b> (20Hz~20kHz, 150Ω @ mic input):	< -125dBu	<b>Maximum Output:</b>	
<b>Maximum Gain</b> (mic/line input to main output):	80dB	main output (balanced)	+24dBu
<b>Input Trim Gain Range:</b>		zone output (balanced)	+24dBu
mic/line input (30dB pad out)	+60dB ~ +20dB	<b>Phantom Power</b> (mic/line input only):	+24 Volts DC
stereo line inputs 1~4	+10dB ~ -50dB	<b>Power Requirements:</b>	115/230VAC 50/60Hz
<b>Input Impedance:</b>		<b>Power Consumption:</b>	10 Watts (maximum)
mic/line input (balanced)	1.7k ohms	<b>Dimensions:</b>	
stereo line inputs (unbalanced)	7k ohms	height (1 rack space)	1.75 inches (44mm)
<b>Maximum Inputs:</b>		width	19 inches (483mm)
mic/line input (balanced)	+27dBu	depth	7.25 inches (184mm)
stereo line inputs (unbalanced)	+27dBu	<b>Weight:</b>	6 lbs. (2.72kg)

## SPM412e REAR PANEL DIAGRAM



## SPM412e BLOCK DIAGRAM

