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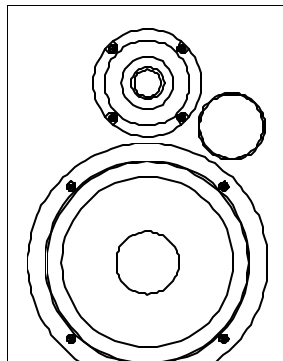
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# PS5 PS6 PS8 PROJECT STUDIO BIAMPLIFIED DIRECT FIELD MONITOR

## REFERENCE MANUAL

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**INTRODUCTION** Thank you for choosing Event Electronics™ Project Studio direct field monitors. Before you proceed, please take a minute to read this manual and familiarize yourself with the product's features, set-up and use.

Our engineers have spent years designing transducers, studio electronics and high performance studio monitoring systems, including some of the most popular professional speakers used today. Now, using the latest in digital acoustic design tools, along with high performance driver and power amplifier technology, we've developed the Event Project Studio monitors, which extend the performance and value limits of direct field monitors again.

Event engineers based these new 100 watt Project Studio monitors on the sound and reliability of our 200 watt 20/20*bas* 8" two-way Bi-amplified System. Indeed, the new bi-amplified PS8 monitor uses the same drivers, enclosure and active 4<sup>th</sup> order crossover as the 20/20*bas* monitor, with only 3dB less maximum acoustic output. The same 100 watt Project Studio amplifier, with different active crossover and subsonic filters, powers the PS5 and PS6.

The benefits of bi-amplification include lowered distortion, smoother amplitude and phase response, extended bandwidth, and convenience. Project Studio amplifiers feature significant improvements in signal-to-noise ratio, input common mode rejection ratio, and reliability. They produce less distortion and less heat as well.

Event Engineers developed the small desktop bi-amplified PS5 speaker using shielded driver and active crossover components from our proven Tri-amplified Monitor. The PS5's have a convenient front panel level control plus a retractable tilt stand for optimum positioning of its wood cabinet in personal monitoring environments.

The new PS6 6½" monitor uses a new magnetically shielded 6½" LF driver to go with our proven 1" natural silk dome HF transducer. The PS6 uses a pair of low restriction bass ports and establishes a convenient intermediate size for high performance 6" two-way systems.

**UNPACKING** Check your speaker carefully. The packing container was designed to protect your speaker during transit; immediately report any damage to your dealer or to the company that delivered them to you. The packing material is designed to be reused—do not discard it. Please complete and return your warranty card to activate your warranty and to help us keep in touch with you. Please tell us what you think of your new monitor and of your Event dealer.

**SETUP** The best performance from any speaker system comes with proper placement and use. There is no physical or acoustic distinction between individual left and right monitors when they are used in a stereo pair. Also, the cabinets can sit vertically or horizontally without concern for performance as long as both are situated similarly. For horizontal mounting, tip the cabinets outward so that the high frequency drivers are away from each other. Since the bass port is front mounted, you can mount the speakers near to, or even in, a wall without blocking the port.

**SPECIFICATIONS**

LF Driver:	PS5: 5 ¼"; PS6: 6½"; PS8: 8" magnetically shielded mineral filled polypropylene cone with high temperature voice coil and damped rubber surround.
HF Driver:	1" magnetically shielded natural silk dome with ferrofluid voice coil coolant.
Frequency Response:	PS5: 45Hz – 39kHz 53Hz – 19kHz, ±3dB, Ref 500Hz PS6: 45Hz – 20kHz, ±3dB, Ref 500Hz PS8: 35Hz – 20kHz, ±3dB, Ref 500Hz
Crossover:	PS5: 2.6kHz active 2 <sup>nd</sup> order asymmetrical PS6: 2.6kHz active 4 <sup>th</sup> order asymmetrical PS8: 2.2kHz active 4 <sup>th</sup> order asymmetrical
LF Amplifier Power:	70W
HF Amplifier Power:	30W
Noise	>100dB below full output, 20kHz bandwidth, unweighted
Input Connectors:	XLR and ¼" connector accepts balanced or unbalanced sources
Polarity:	Positive signal at + input produces outward LF cone displacement
Input Impedance:	40kΩ balanced, 20kΩ unbalanced
Input Sensitivity:	0.9V input produces full output with Input Sensitivity control at maximum
Input Level Control Range:	20dB
Protection:	RF interference, output current limiting, over temperature, turn-on/off transient, subsonic filter, internal mains fuse
Indicators:	Combination Power ON / Clip LED indicator
Power Requirements:	Factory programmed for either 120V~ 60Hz, 220-240V~ 50/60Hz or 100V~ 50/60Hz, 100VA; Power via detachable 3 circuit IEC type linecord
Cabinet:	5/8" vinyl laminated lock-mitered MDF
Dimensions:	PS5: 7½"W x 10½"H x 9"D PS6: 8¼"W x 12½"H x 10"D PS8: 10¼"W x 14¾"H x 11¾"D
Weight:	PS5: 16½ lbs. each PS6: 23 lbs. each PS8: 26½ lbs. each

Model PS5, PS6 and PS8 specifications are subject to change without notice.

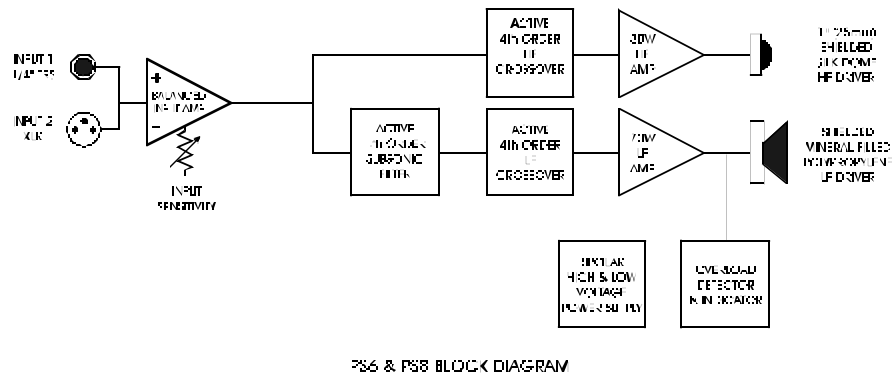
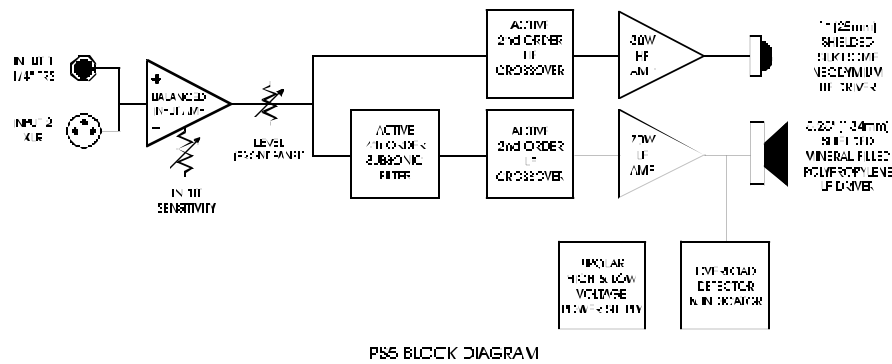
**CARE AND MAINTENANCE** Your Event Direct Field Monitors will not require any special care or maintenance if properly used. The cabinet is finished

with a durable vinyl laminate that can be cleaned with a soft damp cloth. Avoid touching the exposed speaker elements. Do not expose the rear panel controls, connectors, or the speaker elements to moisture or chemicals.

The AC mains fuse is internal and serviceable by a qualified technician. It will only open if there is another problem.

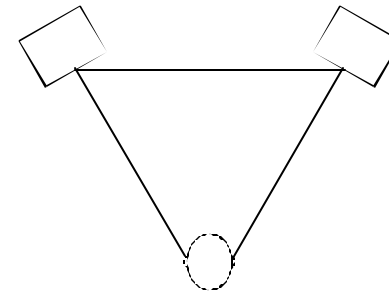
Mix at reasonable levels to protect your speakers and your hearing. Refer service to qualified personnel.

## BLOCK DIAGRAMS



Place your monitors on a stable surface at about ear level. A typical location would be slightly behind and to either side of a small console. The distance between the monitors should equal the distance from the listener to

either speaker. This is the common “equal length triangle” rule for speaker placement shown in Figure 1.



**FIGURE 1. THE PRIME LISTENING POSITION OR SWEET SPOT. THE DISTANCE BETWEEN EACH SPEAKER AND THE MONITORING POSITION SHOULD BE EQUAL.**

Notice that Figure 1 also shows the speaker cabinets turned inward directly facing the listening position. This puts you in the sweet spot, which yields the most accurate stereo reproduction. If you need a wider sweet spot to allow for greater listener movement or for group monitoring, face the speakers in a slightly more open position, but never more than necessary. Finally, if you must mount the speakers substantially above or below ear level, then you will also need to tilt the cabinets downward or upward as well to keep them directly facing you.

For close-in, personal monitoring situations with the PS5, use the tilt stand if necessary to raise the radiation main axis.

Once you start using your Event monitors, you may find it helpful to move around in their soundfield to locate their best position in your environment, but if you follow the equal distance, ear level, face-on rules, you’ve already optimized their position for a single user in most situations.

## CONNECTIONS AND OPERATION

Please refer to Figure 2

balanced or unbalanced. The **LINE 2 INPUT** connector is hardwired in parallel with the **LINE 1 INPUT** connector, so either may be used as an input or a pass-through connection. Input specifications apply to both inputs.

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INPUT CONNECTIONS		
	LINE 1	LINE 2
SIGNAL	1/4"	XLR
+	TIP	PIN 2
-	RING	PIN 3
SHIELD	SLEEVE	PIN 1

- 1 LINE 1 INPUT** This jack accepts a 1/4" TRS connector, wired either balanced or unbalanced.

For balanced wiring, a 3-conductor 1/4" TRS plug is necessary. See the INPUT CONNECTIONS wiring chart below or on the amplifier panel.

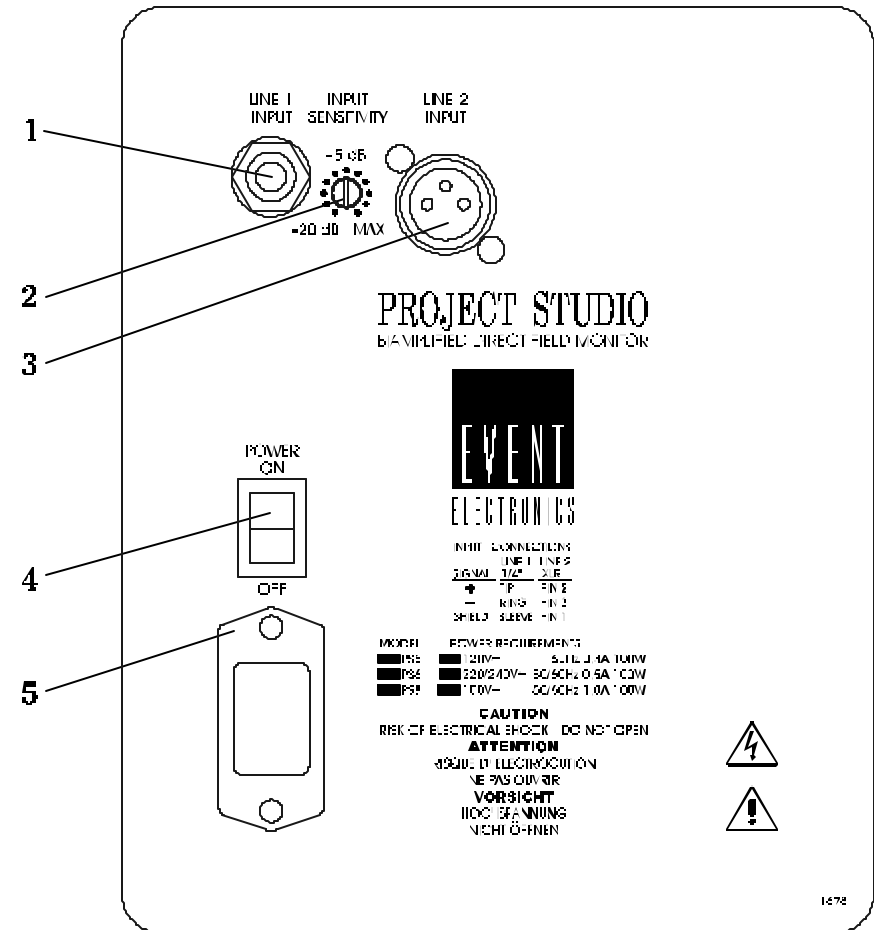
Unbalanced wiring works with either a 2 or 3-conductor 1/4" TRS connector. A 2-conductor 1/4" TS plug automatically grounds the minus signal input, whereas a 3-conductor TRS plug wired unbalanced provides the option of leaving the minus input open or grounded. We recommend that you ground the unused input.

The **LINE 1 INPUT** connector is hardwired in parallel with the **LINE 2 INPUT** connector, so either may be used as an input or a pass-through connection. Input specifications apply to both inputs.

- 2 INPUT SENSITIVITY** This control has a 20dB range and compensates for different input signal levels. If too much input signal is present, the amplifiers may overload, in which case the green LED at the front of the monitor will flash. With the **INPUT SENSITIVITY** control at maximum, 0.9V RMS input will produce full amplifier output.

The PS5 monitor has an additional front panel **VOLUME CONTROL** (not shown) that effectively works in series with the rear panel **INPUT SENSITIVITY** control. The **VOLUME CONTROL** is useful for quick, uncalibrated adjustments from the front. With a full input signal applied, turn the front panel **VOLUME CONTROL** to maximum. Starting from minimum, increase the **INPUT SENSITIVITY** to your maximum achievable output level preference. The front panel volume control will then attenuate from that operating point.

- 3 LINE 2 INPUT** This jack accepts XLR input connections, wired either



- 4 POWER SWITCH** 1 = ON 0 = OFF  
When amplifier power is on, the green LED at the front of the monitor will illuminate.
- 5 POWER CONNECTOR** This connector accepts the detachable linecord. Use the linecord supplied with your monitors and make sure it is fully seated into the Power Inlet connector. For safety reasons, do not attempt to defeat the linecord's ground connection. The AC mains fuse is internal.

**FIGURE 2. REAR PANEL**

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