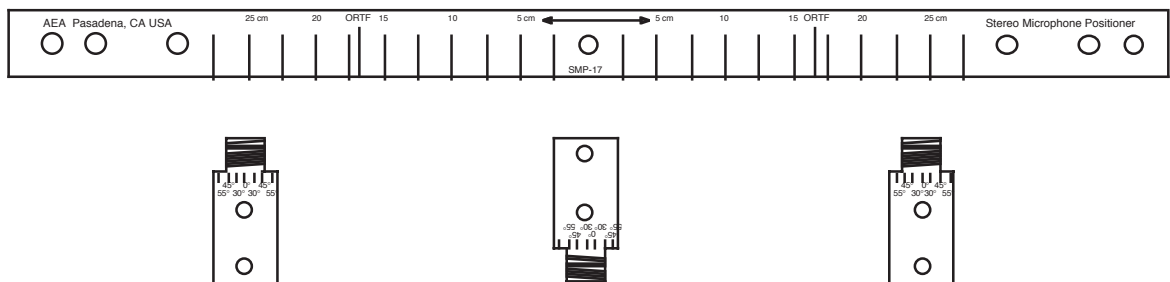


AEA STEREO MIC POSITIONER USER'S GUIDE

The AEA Stereo Microphone Positioner (SMP) was first conceived as a device for mounting a stereo pair of Coles 4038 ribbon microphones. However, as the project evolved, it soon became evident that we could design it to provide a secure and versatile support for microphones from almost any manufacturer — even the heavy large diaphragm condensers which ordinarily will not fit on a conventional “stereo bar.”

The SMP consists of a sturdy one-inch wide hard-anodized aluminum bar and three microphone sliders. The bar is available in two sizes, 17-inches and 33-inches, and is engraved across its length in 2.5-cm increments. With zero at the center, these markings designate the *distance between the sliders*, with special markings to indicate the 17-cm spacing unique to the ORTF stereo system. The sliders are marked around the circumference at 0°, ±30°, ±45°, and ±55°. These represent included angles of 60°, 90°, and 110° respectively between the microphones, and may be used to facilitate exact and repeatable positioning of any conventional stereo perspective. Each slider is fitted with two thumb-screws to secure it onto the bar. Extra-wide locking rings are provided for each slider, and one female threaded coupler is included to allow the SMP to be mounted on a microphone stand or boom. For more complex microphone arrays, additional sliders may be ordered separately (AEA part no. SMP-S).



Use of the SMP horizontally provides an easy platform for creating

any of the common *near-coincident* stereo pickup configurations with microphones of almost any size, shape, or pickup pattern. Using smaller, axial-address microphones, *intensity* or coincident stereo configurations can be achieved as well.

Place one slider in the center of the bar, with the threaded end facing downward, install the female threaded coupler, and mount the SMP on your mic stand. The other two sliders should be installed, one on either side of the bar, with the threads facing upwards. (Placing the mics above the bar will minimize acoustical reflections from the stand and bar; however, if you prefer, the mics may be positioned below the bar.) Once mounted on the sliders, the distance between the two microphones may be adjusted for any desired stereo perspective, and read directly from the markings on the bar. Next, the included angle between the axes of pickup may be adjusted by rotating the microphones on the sliders, using the markings as a reference.

<< PHOTO OF TLM-170's ON SMP >>

When creating a coincident stereo array with two axial-address microphones, a vertical offset is desirable so that they may be positioned with their capsules one directly above the other. To accomplish this, a riser may be installed on one of the sliders if there is insufficient thread depth in the microphones' stand adaptors to achieve the offset directly. To create the riser, use an Atlas AD-4B male coupler with an AD-5B chrome female coupler. If you prefer, you may order a female coupler in black finish to match the SMP (AEA part no. SMP-C).

Vertical orientation is similarly easy to accomplish, and enables even very large side-address microphones to be configured into coincident stereo arrays, such as XY, Mid/Side (M/S) or “Blumlein” (crossed figure-of-eights). Simply install one of the sliders on either end of the bar; as before, the female coupler may be used to mount the SMP on a stand or boom arm. The other two sliders should be set at a spacing which will allow the two microphones to be positioned “head-to-head” as closely together as is possible, but without actually touching each other. Once the microphones are mounted on the bar, simply rotate them in their mounts to achieve the appropriate angle between their axes of pickup.

For added safety when the SMP is used vertically, we suggest that the lower microphone slider always be positioned such that the thumb-screw may be secured through one of the mounting holes.

When using Coles 4038 ribbon microphones, one microphone slider should be located at the *third* hole in from one end of the bar, and the other slider at the *second* hole in from the opposite end. When used with AEA’s 4038-SA custom mounting adaptors,

this will position these mics so that they do not interfere with each other.

If you regularly use a particular pair of microphones with the SMP, you might consider drilling your own special positioning holes (5/16" diameter) to provide an even more secure and repeatable mounting.

Often it is necessary to “fly” the microphones above an audience to minimize the visual intrusion during live performances. To hang the SMP array horizontally, a single support line should be connected to the center hole of the bar; this will suspend the array. Mono-filament “guy lines” may be tied to the outer holes to prevent rotation or to “breast” the array if needed. The microphone sliders should be oriented so that the microphones hang downward from the bar.

To hang the SMP as a vertical array, the uppermost hole should be used for the support line. The bottom hole should be used for guying or breasting lines. Tilting the entire assembly downward slightly will lessen the tendency of the array to rotate. To increase stability when using some large or heavy microphones, a conventional stereo bar (such as those available from Atlas, KM, AKG, and others) may be attached to the third slider and mounted at the bottom of the SMP to provide a cross-brace for attaching guy lines.

It is important to note that when flying microphones on the SMP, a strong cable should bear the weight of the entire array. The microphone cables should never be used other than as the breast or support lines. Remember, also, to securely fasten the support cable to the SMP.

This user's guide is a first edition. We would appreciate your comments, whether positive or negative, about this manual and our products.

AEA also manufactures collapsible 15-foot aluminum microphone stands, battery powered headphone amps with a Mid/Side decode mode, MS stereo processors both with and without microphone preamplifiers, and a variety of accessories for the Coles 4038 studio ribbon microphone.

Since 1981 we've acted as the US agent for Coles Electroacoustics, manufacturers of the 4038 studio ribbon microphone and the 4104B, a “lip” mic for voice-over work in high noise environments. We sell and service the mics and stock spare parts.

In North America we represent CB Electronics, a leading worldwide supplier of machine control equipment to the sound-for-film industry. Their products specialize in professional control of and translation between bi-phase, 9-pin serial and time code machines. Their new SR line provides low cost multiple machine remote controls for RS-422, Sony, and Tascam DA88 protocol machines.

Our Audio Test Department buys, sells, trades, and rents new and used audio test gear. Audio Precision, B&K, Hewlett Packard, Galaxy, Goldline, Neutrik, and Amber are among the lines we maintain in stock for audio measurements of Level, Polarity, Phase, THD and IMD distortion, W&F, SPL,

and spectrum RTA.

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