

## STEREO MICROPHONE ADAPTER



The Shure model A27M is a stereo microphone adapter designed to hold two microphones in selectable positions for stereo broadcasting, recording or sound reinforcement. It allows two microphones to share one stand without losing independent positioning flexibility. The A27M permits coincident or closely spaced mounting with a wide range of directional angles, and vertical microphone separations of 1 1/4 inches (31.8 mm), 2 5/8 inches (66.7 mm) or 4 inches (102 mm).

The A27M consists of two vertically stacked sections that rotate on their centers. Each contains a 5/8"-27 threaded stud and locking ring to accept a variety of microphones. The bottom section contains a 5/8"-27 adapter for mounting on a microphone stand. A cable clamp for holding microphone cables is included.

## Installation

To install the A27M, follow these steps:

- Determine the vertical separation between microphones you desire. Minimum separation (coincident spacing) is generally desirable, but it may be necessary to provide greater spacing to accommodate the size or style of the microphones. By repositioning the sections of the A27M, the threaded studs may be 1 1/4 inches (31.8 mm), 2 5/8 inches (66.7 mm) or 4 inches (102 mm) apart.
- To reposition the sections, unscrew the knurled knob at the top of the A27M and slide the two black sections off the vertical rod. Reposition the sections with the studs positioned for the vertical spacing desired. Replace the knurled knob.

- 3. Attach the microphones or swivel adapters (such as the Shure A57D or A57E) to the 5/8"-27 studs.
- 4. Attach the A27M to a microphone stand with a 5/8"-27 mounting thread.
- 5. Insert the microphones in the swivel adapters, loosen the knurled knob on the top of the A27M, and position the microphones for the desired response angles. The top of the knurled knob contains reference marks every 45°; these may be used to position the microphones at the desired angle (see Figure 1).

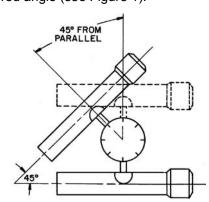


FIGURE 1

- 6. Tighten the knurled knob, attach the microphone cables, and use the supplied cable clamp to fasten the microphone cables to the A27M.
- 7. Raise the microphone stand to the desired height. Figure 2 shows a pair of Shure SM81 microphones mounted in an "ORTF" configuration on the A27M.



FIGURE 2

## Stereo Recording Options

The A27M supports various popular pickup systems. Those described below result in (1) improved imaging over widely spaced microphones, and (2) superior depth reproduction over individually miked instruments. The spaced microphone technique creates a stereo effect mainly because of differences in the arrival time of the sound at each microphone. Coincident systems produce minimal arrival time differences. The stereo effect they create is due to interchannel amplitude differences. Closely spaced or near-coincident placement lends both time and amplitude differences to the stereo effect.

The table below describes five popular stereo pickup systems. It specifies microphone types, angles and spacing. Those with coincident spacing have their diaphragms vertically in line. Closely spaced microphones have their diaphragms separated by the specified distance. These and other microphone systems are detailed in the book "Stereo Microphone Techniques" by Bruce Bartlett (1991, Focal Press. ISBN 0-240-80076-1) and in "Microphone Techniques for Music Studio Recording" (AL1265) available from Shure Incorporated.

Stereo Pickup systems	Microphone Types	Microphone Configurations	
X-Y	2 Cardioid	Axes of maximum response at 135°; spacing: coincident	135°
ORTF (French Broadcasting Corporation)	2 Cardioid	Axes of maximum response at 110°; spacing: 17 cm. (7 in.)	110°
NOS (Dutch Broadcasting Foundation)	2 Cardioid	Axes of maximum response at 90°;spacing: 30 cm. (12 in.)	90°
Blumlein Pair or stereosonic	2 Bidirectional	Axes of maximum response at 90°; spacing: coincident	90°
MS (Mid-Side)	1 Cardioid 1 Bidirectional	Cardioid and bidirectional forward pointed; spacing: coincident	CARDIOID (M)  BIDIRECTIONAL L=M+S (S)

## **Full Two Year Warranty**

Shure warrants this product to be free in normal use of any defects in workmanship and materials for two (2) years from the date of purchase. If your Shure product fails within this period, call 1-800-516-2525 in the United States for details on repair, replacement, or refund. In Europe, contact

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