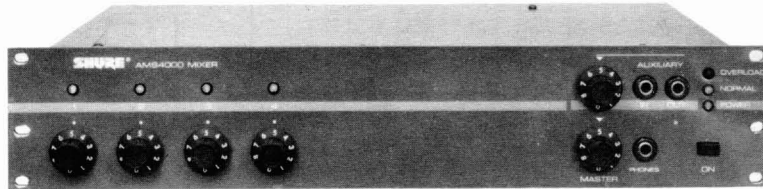
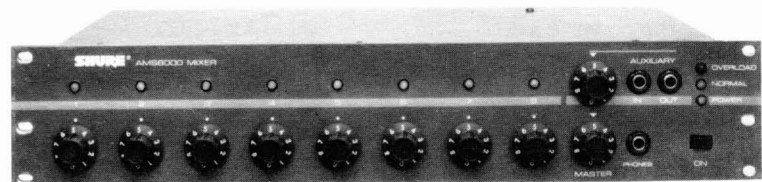


SHURE AUTOMATIC MICROPHONE SYSTEM OPERATING INSTRUCTIONS

**AMS4000****AMS24****AMS26****AMS28****AMS22****AMS8000**

The Shure Automatic Microphone System consists of the AMS8000 [or AMS4000] Mixer used with Shure AMS Microphones. This system's excellent performance, versatility, and ease of use make it an ideal choice for multiple-microphone public-address and recording systems such as used in conference rooms, legislatures, churches, court-rooms, broadcast studios, teleconferences, and panel discussions.

The Shure Automatic Microphone System solves many problems associated with multiple-microphone installations, such as boomy or muddy sound, insufficient sound level because of feedback [howling], and operator errors. It does this by turning on only those microphones in use, thus keeping the number of "on" microphones to a minimum. When a person speaks in front of his microphone [within 60° of each side of the front], the microphone turns on. Sounds origina-

ting at the sides or rear of the microphone will not turn it on. In addition, the system automatically reduces its volume as the number of "on" microphones increases, thereby preventing feedback.

The Shure AMS also solves problems encountered with other automatic mixers such as complicated setup adjustments, unreliable turn-on, and choppy sound. The microphones turn on smoothly and dependably, free of pops or clicks, and virtually independent of talker loudness or distance.

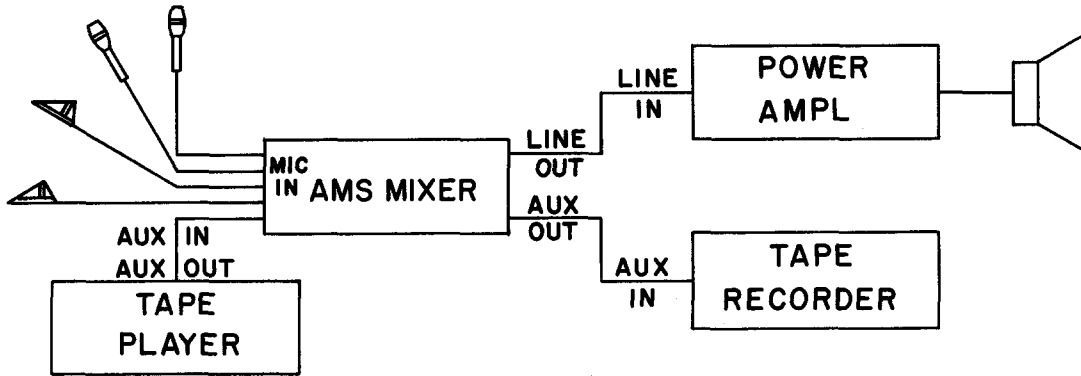
You'll find the Shure Automatic Microphone System simple to install and operate, requiring little more adjustment than an ordinary PA system. However, the system can also perform a variety of sophisticated functions. Model AMS8000 has eight microphone inputs; Model AMS4000 has four microphone inputs.

IMPORTANT

Shure AMS4000 and AMS8000 Mixers are designed for use only with Shure AMS Condenser Microphones. Conventional condenser or other microphones will not operate properly with the AMS4000 and AMS8000.

BASIC SETUP: THE AMS BACK PANEL

The following instructions are for typical applications, installations and operation. Refer to the AMS Installers Manual for further information.

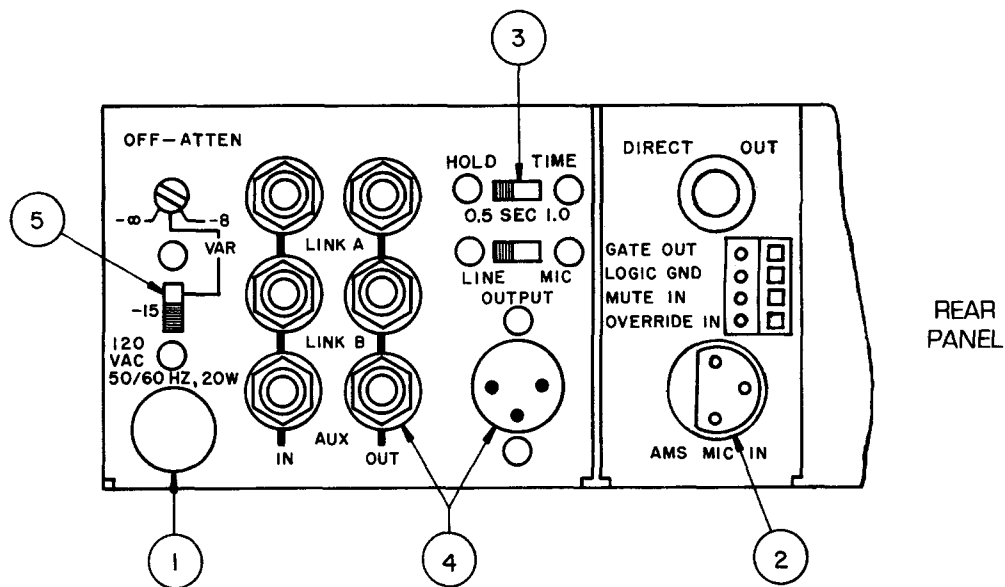


TYPICAL CONNECTIONS

WHAT TO DO

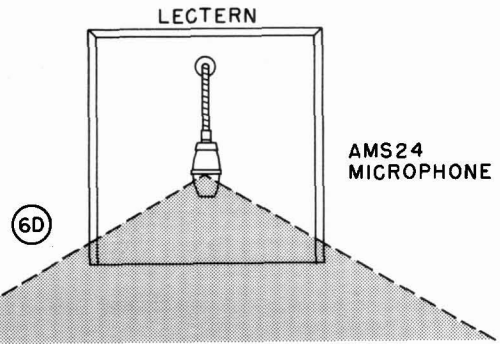
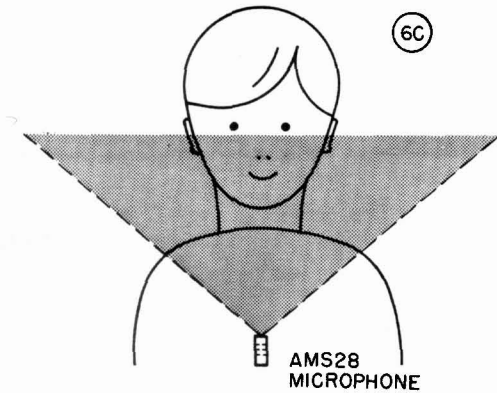
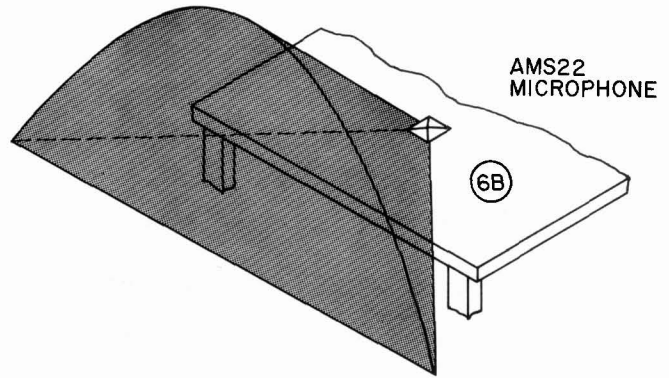
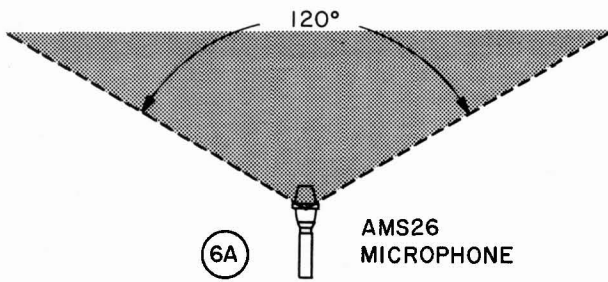
HOW TO DO IT

- | | |
|--|--|
| 1. Connect the power cord. | 1. Make sure the front panel power switch is off. The unit is factory-wired for operation at 120 Vac, 50/60 Hz. |
| 2. Connect the AMS microphones. | 2. Use only Shure AMS Microphones. When extension cables are needed, use conventional 2-conductor shielded microphone cables. |
| 3. Set the Hold Time switch. | 3. Use the 0.5-second position for most applications. |
| 4. Connect the Line/Mic or Aux Output to the PA amplifier, tape recorder, or other system. | 4. Use the Mixer Aux Output for connecting to phone or phono jack aux or line inputs. Use the Line/Mic Output for connecting to 3-pin professional balanced inputs; set the Mic/Line switch as required. |
| 5. Set the Off-Attenuation switch. | 5. Use the -15 position for most applications. |



REAR PANEL

BASIC SETUP: THE MICROPHONES



WHAT TO DO

HOW TO DO IT

6. In general, place the talker within the front acceptance angle of the microphone.

6. Sound sources outside the shaded acceptance angle will not turn on the microphone. See diagrams 6A through 6D.

7A. If the chairs are 3 feet or less from each other, use one microphone between each pair of seats.

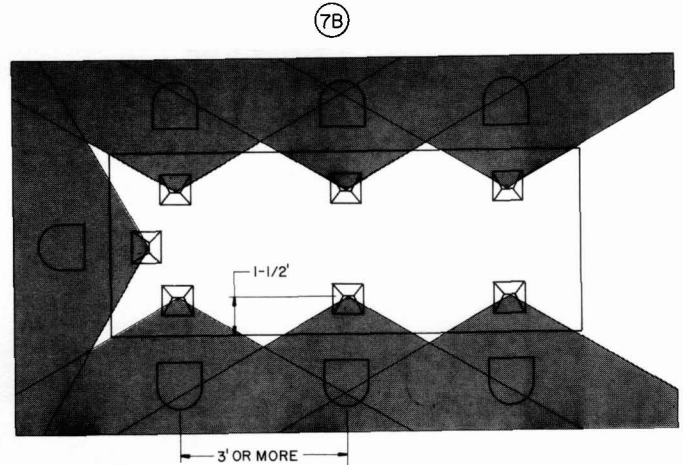
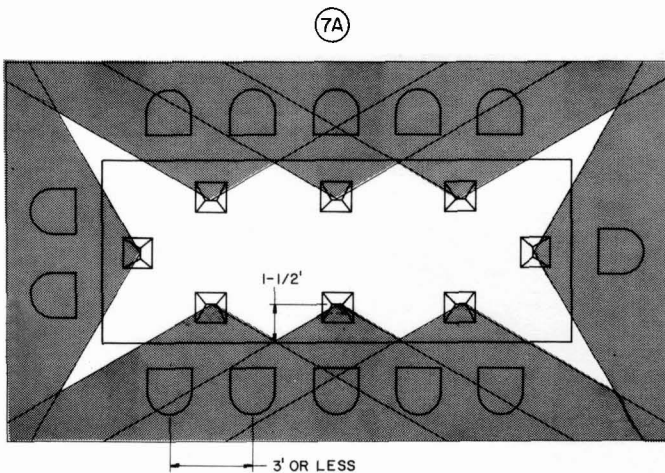
7A. Place each microphone a foot and a half from the table edge, halfway between the two seats [diagram 7A].

7B. If chairs are more than 3 feet from each other, use one microphone per seat.

7B. Place each microphone a foot and a half from the table edge, directly in front of the talker [diagram 7B].

8. Remove any objects immediately behind the microphones that may reflect sound.

8. The grille of an AMS26 [probe] or AMS24 [gooseneck] microphone should be at least 8 inches above any tabletop. [The A26X Extension Tube inserted between the swivel adapter and desk stand will raise the AMS26 an additional 3".] Remove objects behind AMS22 microphones.

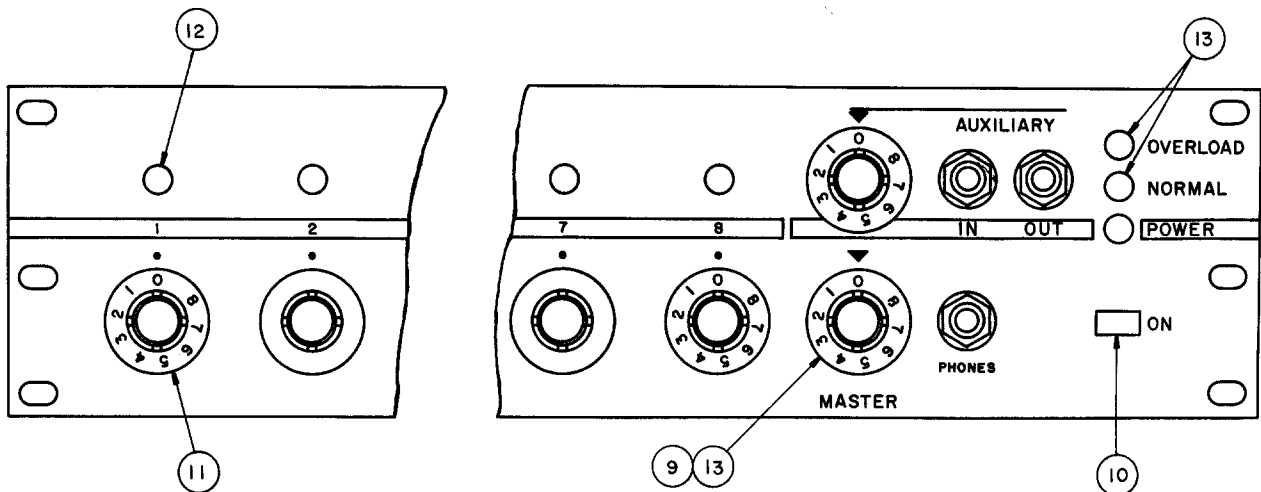


OPERATION: ON THE FRONT PANEL

WHAT TO DO

HOW TO DO IT

- | | |
|--|--|
| 9. Turn the Master volume control down. | 9. Turn it fully counterclockwise. |
| 10. Turn on the power. | 10. Push in the AMS Power switch. |
| 11. Adjust volume controls. | 11. Set the individual volume controls to "5" for each channel used. Set all unused channels to the "0" position. |
| 12. Check each microphone channel. | 12. Each channel's yellow indicator will light during speech to show that the microphone turns on. |
| 13. Set the Master volume control. | 13. Turn up the Master until the yellow Normal light flickers during speech. If the red Overload light flashes, turn down the Master until the red light is out. |
| 14. Turn on the power amplifier, tape recorder, or other system. | 14. While a person is talking in front of the microphone, set the volume of the amp, etc., for the desired result. In PA use, adjust for desired loudness without feedback. Some tape recorders require lower than normal AMS Master settings to avoid distortion. |
| 15. Make microphone levels equal. | 15. Have someone talk in front of each microphone. Adjust the individual channel controls for output equal to that of the first microphone, or for the desired loudness without feedback. |



FRONT PANEL

OPERATION: ADDITIONAL OPTIONS

OPTION	HOW TO DO IT
● Adding pre-recorded material to the AMS output..	● Connect the aux (line) output of the player to the Auxiliary input (front or rear panel) of the AMS. Control recorder volume with the Auxiliary control.
● Recording the AMS output.	● Connect the AMS Auxiliary output (front or rear panel) to a tape recorder aux or line input.
● Recording an individual channel output.	● Connect the Direct Out from the desired channel to the microphone input of a tape recorder. The Direct Out is always on and is not affected by any AMS Mixer controls.
● Listening to the AMS output with headphones.	● Connect a mono or stereo headphone plug to the Phones jack.

TROUBLESHOOTING

NO SOUND:	Check that the microphones are plugged in and that the Master and individual controls are turned up. Sound from headphones plugged into the Phones jack indicates the problem is not in the AMS.
MICROPHONE TURNS ON ERRATICALLY OR NOT AT ALL:	Check that the talker is within the 120° acceptance angle of the microphone (diagram 6). Remove any reflecting objects behind the microphone. AMS26 [probe] or AMS24 [gooseneck] only: Make sure that the microphone grille is at least 8 inches above the surface.
MICROPHONE TURNS ON FOR UNWANTED SOURCES:	Move unwanted source outside microphone acceptance angle.
DISTORTED SOUND:	If the red Overload light is flashing, turn down the Master until the light goes out. If loud talkers are close to their microphones, turn their channel controls down. In general, the channel controls for AMS22 [low-profile] microphones should be set lower than those for AMS26 [probe] microphones in order to obtain the same output volume. Some tape recorders may require lower AMS Master settings to prevent distortion.
OTHER:	If none of the above solutions solves your problem, consult your AMS sound installer or the Troubleshooting section of the Installers Manual.

WHAT TO EXPECT FROM YOUR AUTOMATIC MICROPHONE SYSTEM

- Microphone turn-on will be reliable, fast, and smooth. There will be no clicks or clipped words.
- After long pauses in speech, the microphones will smoothly fade to a lower volume level.
- When the first microphone turns on, there will be a perceptible rise in room noise. There will be no further increase when additional microphones turn on.
- In many seating arrangements, several people will be within the acceptance angle of a microphone, so all will turn it on. Papers rustling may also turn a microphone on; this will not affect the system's clarity because of the subtle way in which it operates.
- A person within the acceptance angles of several microphones will turn them all on. Again, this will not seriously degrade the clarity of the system.
- In noisy or highly reverberant rooms, the acceptance angle will narrow slightly. For reliable turn-on in these circumstances, talkers should be closer to their microphones.
- The Shure AMS will sound much clearer than a conventional multi-microphone system.

SHURE[®]

SOUND OF THE PROFESSIONALS[®]... WORLDWIDE