### **MODEL PES45 SPECIFICATIONS**

Type: Dynamic, Cardioid (Unidirectional).

Frequency Response: 50 to 15,000 Hz (cps)

Impedance: High.

Output Level: 55 db (1.76 mv) below 1 volt per microbar.

Switch: Built-in "On-Off" switch as a part of the swivel assembly.

Shock Mount: Internal Vibration-Isolation unit of rubber construction.

Case: Chrome-plated, die-cast and black "Armo-

Dur" case. Stainless steel grille.

Net Weight: 9 oz. (255 grams)

### **FURNISHED ACCESSORIES**

Cable:

Model C5-4, 20-foot (6.1 m) one-conductor, shielded, with microphone connector and standard phone plug attached.

AMPHENOL 03 2 SHIELD SLEEVE CONNECTION MADE THRU PHONE PLUG SCREW TO PLUG SHELL

Windscreen:

Lightweight acoustic filter cap especially designed to attenuate wind noises and breath blasts. (Part 80A61)

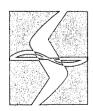
Swivel Adapter:

Model A25B, long life, high quality swivel connector, lined with a long-life nylon sleeve for noise-free and scratch-free insertion and removal of microphone.

**GUARANTEE:** Each microphone is guaranteed to be free from electrical and mechanical defects for a period of one year from date of shipment from factory, provided all instructions are complied with fully. In case of damage, return the microphone to the factory for repairs. Our guarantee is voided if the microphone is subjected to accident or abuse or if the case is opened.

AREA CODE 312/328-9000

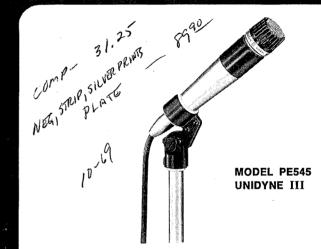
CABLE SHUREMICRO



SHURE BROTHERS, INC. 222 HARTREY AVENUE EVANSTON, ILLINOIS 60204 U.S.A.

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# DOFESSIONAL ENTERTAINER MICROPHONES



Your selection of a Shure Unidyne Microphone will contribute significantly to the professional quality of your performance. Shure Unidyne Microphones are unidirectional. This means that they pick up sound only from the front of the microphone. They suppress unwanted audience noise or other noises occurring at the rear of the microphone. You can work at significantly greater distances (up to 75% more) from the microphone than with non-directional microphones, without picking up objectionable background sound or the very annoying loudspeaker "squeal" (feedback). You don't have to lean over your instrument and get close to the microphone in order to be heard.

(See inside for information on how to use your Shure Microphone most effectively.)

### HOW TO CONTROL FEEDBACK

A performer's number one enemy in using a microphone is "feedback." This is a harsh, shrill squeal which occurs when the microphone picks up sound from the loudspeakers, re-amplifies and rebroadcasts it over and over again.

But take heart, you have already taken the best possible step to defeat feedback by selecting a Shure Cardioid Microphone. The unidirectional (frontal pickup) characteristics of the microphone are valuable in rejecting the sound from the loudspeakers so that feedback does not occur.

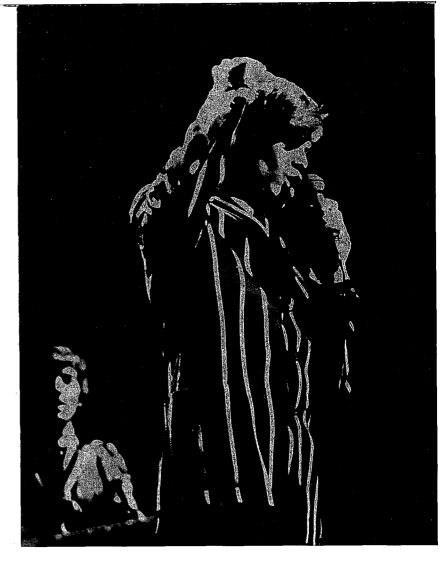
Another factor to remember in the prevention of feedback is the position of the loudspeakers in relation to the microphone. Even with a Cardioid Microphone, feedback can occur if the front (live) end of the microphone picks up sufficient sound coming from loudspeakers. Keep the loudspeakers as far to the sides as possible—so they do not point toward the front of the microphone. Whenever possible, it is good practice to keep the microphone between the performer and the loudspeakers.

If you are in a room with hard walls, floor, and ceiling, the sound from the loudspeakers may bounce back into the microphone and create feedback. Solve this problem by turning down the amplifier volume control and working closer to the microphone.

# BASIC POINTS FOR PROFESSIONAL MICROPHONE TECHNIQUE

As with any instrument used in your performance, proper microphone technique will add to the over-all effectiveness with which you project yourself to your audience. Keep the following points in mind when using the microphone:

- Maintain the proper distance from the microphone.
   When you wish to achieve an intimate tonal quality,
   get closer to the microphone and lower your voice.
   For wide-open "driving" effects, raise your voice and
   back away from the microphone so that you do not
   overdrive your amplifier to distortion.
- Don't needlessly change your distance from the microphone, as this will affect the level of sound coming from loudspeakers.
- Consider the microphone as an instrument and practice your technique to enhance your performance.



# THE VITAL LINK BETWEEN YOU AND THE AUDIENCE

SHURE PROFESSIONAL ENTERTAINER MICROPHONES

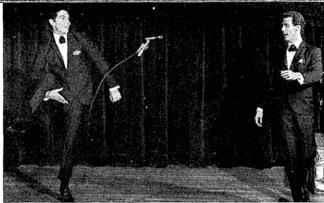


### USING MORE THAN ONE MICROPHONE

It will often be desirable for a group to use a separate microphone for each individual performer. In this case, the following points should be remembered:

- It is best if the microphones are individually controlled for volume through a separate microphone mixer such as the Shure PE68M Mixer or PE70RM Reverb/Mixer. If this is not possible, it is desirable that each per-former use the same type and model of microphone so that the performance of the group as a whole will be "balanced."
- Check the placement of the microphones with relation to loudspeakers (as mentioned before) so that feedback is minimized.





(Don Kelley and Jimmy Dale of The Swingin' Lads)

## YOUR SHURE MICROPHONE IS BUILT TO LAST!

Your Shure Microphone is ruggedly built and should give you years of uninterrupted service; however, remember that it is a sensitive electronic instrument. Avoid dropping the unit, or subjecting it to unnecessarily rough treatment. Normal usage, of course, will not impair performance of the unit. Use the protective carrying case to prevent damage not only when travelling, but also when storing the microphone.

### CHECK-LIST BEFORE USING MICROPHONE

- Check microphone connector-is it plugged into the high impedance input of the amplifier?
- Check microphone cable connectors to microphone, mixer, and amplifier—are they tightly plugged in?
- Check microphone, amplifier and/or mixer.
  a. Are they turned on?

  - b. Are volume controls turned up?

If microphone still does not appear to be operating: Check microphone on a spare cable. If microphone still does not appear to be operating, have unit checked by your Shure Professional Entertainer Products Dealer, or write Service Department, Shure Brothers, Inc.

# THE VITAL LINK BETWEEN YOU AND THE AUDIENCE

SHURE PROFESSIONAL ENTERTAINER **MICROPHONES**