

CONTROLLED MAGNETIC® COMMUNICATIONS MICROPHONE

GENERAL

The Model 444 is a pressure-operated CONTROLLED MAGNETIC® microphone. It is specifically designed for radio communication applications and provides optimum performance from single sideband transmitters as well as AM and FM units. The response cuts off sharply below 300 and above 3,000 Hz, with a rising characteristic to 3,000 Hz. This special response characteristic results in optimum speech intelligibility and audio punch to cut through noise and interference.

Microphone Features:

- A response tailored for single sideband transmissions
- A switch for instantaneous selection of Press-to-Talk or VOX (voice-operated relay control) operation
- Finger-tip control bar (locking or non-locking action) to actuate microphone and an external relay or control circuit
- Long-life switch to satisfy severe requirement of communication systems
- Adjustable microphone height
- A sturdy, high impact ARMO-DUR® base and microphone case
- Dependability—under all operating conditions

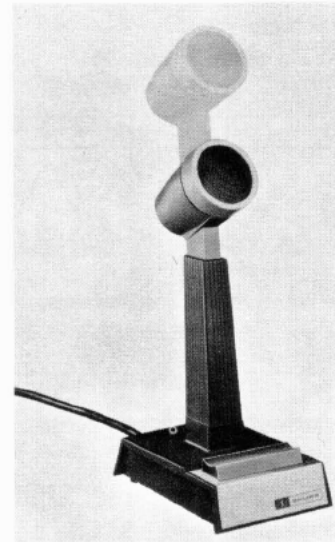
PRESS-TO-TALK SWITCH OPERATION

The finger-tip control bar can be used as a locking or nonlocking switch. To use as a nonlocking switch, simply depress the control bar and release after transmission. To use as a locking switch, depress the control bar and pull it forward. To unlock the switch, move the bar back and release.

NORMAL-VOX OPERATION

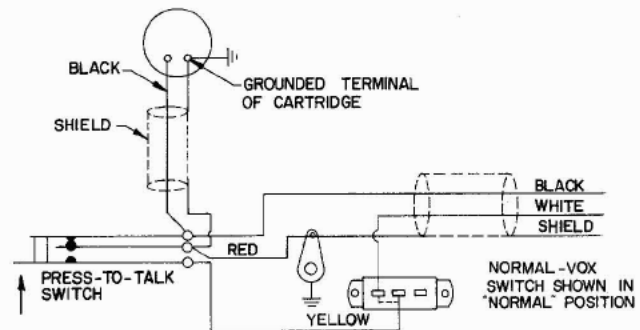
Most amateur equipment is wired to use either VOX (voice-operated relay control) or a Press-to-Talk switch. Model 444 has been designed to provide maximum flexibility for both types of operation. VOX or Press-to-Talk operation may be easily selected by the Normal-Vox slide switch on the bottom side of the microphone base near the cable entry.

For Press-to-Talk operation of the microphone, the Normal-Vox switch should be in the "Normal" position. For VOX operation, the Normal-Vox switch should be in the "VOX" position, and the Press-to-Talk switch must be locked in the On position.



CONNECTIONS

Model 444 is designed for use with transmitters or amplifiers having high-impedance inputs. The BLACK cable lead is the "hot" conductor for the microphone circuit; the WHITE cable lead controls an external relay circuit. The shield is common to both the microphone circuit and the external relay circuit. The shield should be securely grounded to the amplifier or transmitter chassis ground. (See Figure 1 for internal wiring diagram of Model 444.)



INTERNAL CONNECTIONS
FIGURE 1

IMPORTANT

Shure Microphone Cables are selected after exhaustive tests to insure superior performance in microphones because of low capacitance, superior shielding properties and unusually long life under severe use.

Cables with plastic insulation should not be subjected to excessive soldering-iron heat. Carefully clean and tin the conductors and the connections to which the conductors are to be soldered. The soldering operation can then be done with a minimum of heat, thereby avoiding any possibility of damage to the cable.

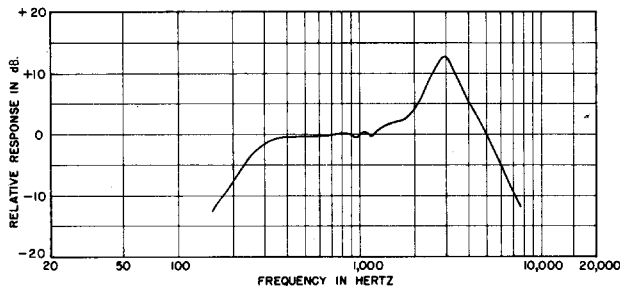
SPECIFICATIONS

Type

CONTROLLED MAGNETIC®

Frequency Response

200 to 6,000 Hz (See Figure 2)



TYPICAL FREQUENCY RESPONSE

FIGURE 2

Polar Pattern

Omnidirectional

Impedance (at 1,000 Hz)

Microphone impedance is "High" for connection to high-impedance microphone inputs

Load Impedance Range

Minimum, 15 kilohms
Recommended, 100 kilohms

Output Level (at 1,000 Hz)

Open Circuit Voltage -53.0 dB* (2.25 mV)
Loaded with 100,000 ohms ... -54.0 dB*

*0 dB = 1 volt per microbar

Switch

Press-to-Talk switch—locking or nonlocking operation to actuate microphone and an external relay or control circuit

Normal-Vox switch—single-pole double-throw slide switch in microphone base to provide either voice-operated relay control or Press-to-Talk microphone operation

Cable

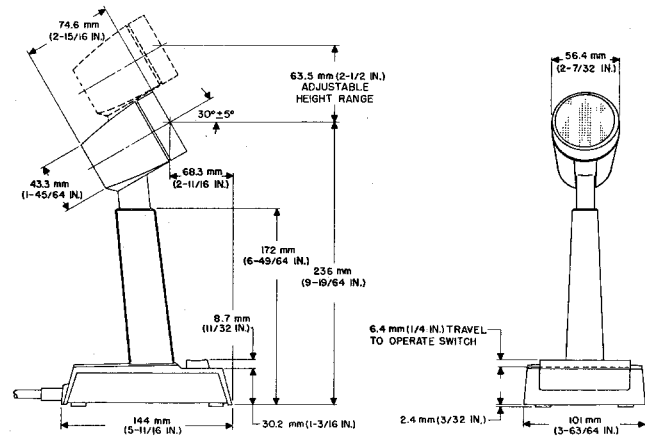
Non-detachable 2.1m (7 ft), two-conductor shielded plastic jacketed

Case

Two tone gray ARMO-DUR®

Dimensions

See Figure 3



OVERALL DIMENSIONS

FIGURE 3

Net Weight

680 grams (1½ lb)

Packaged Weight

964 grams (2⅛ lb)

REPLACEMENT PARTS

Cartridge	R5R
Cable	70A293
Screen and Grille Assembly	90A1060
Press-to-Talk Switch	90A946

GUARANTEE

This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor. This guarantee is in lieu of any and all other guarantees or warranties, express or implied, and there shall be no recovery for any consequential or incidental damages.

SHIPPING INSTRUCTIONS

Carefully repack the unit and return it prepaid to:
Shure Brothers Incorporated
Attention: Service Department
1501 West Shure Drive
Arlington Heights, Illinois 60004

If outside the United States, return the unit to your dealer or Authorized Shure Service Center for repair. The unit will be returned to you prepaid.