

Citizens Band Ceramic Microphone

General: The Model 275SK Microphone is a pressure operated, diaphragm type Ceramic microphone, ideally suited for use under adverse climatic conditions. The Model 275SK is relatively immune to adverse temperature and humidity conditions. The microphone will operate in temperatures up to 170°F. The microphone is high impedance, has a smooth clear response, high degree of versatility and dependability and was designed to meet the varied requirements of Citizens Band operation, etc. (See Applications).

The Model 275SK is provided with a bracket for supporting the (hand operated) microphone when not in use. The bracket is easily mounted to a convenient wall or panel. The microphone is simply lifted out of bracket for use, and fits conveniently and comfortably in the palm of the hand.

The Model 275SK has a built-in switch to control an external relay or control circuit. The switch is a momentary slide-to-talk non-locking type unit.

Applications: The Model 275SK Microphone is especially recommended for mobile and fixed station use in Citizens Band, Police, Fire, Utility, Forestry and Transportation Services. The Model 275SK is, also, very suitable for call systems, radio telephone, amateur use, recording and similar applications. The Model 275SK is ideal as a replacement microphone for most popular models of Citizens Band equipment where a high impedance Ceramic or Crystal microphone is used. (See equipment manual). The Model 275SK has a built in control switch with attached cable allowing flexible arrangement of connections to meet most requirements of Citizens Band equipment. (See Fig. A) The 275SK Microphone is a rugged unit and is recommended for use where good quality is required at low cost.

SPECIFICATIONS

Frequency Response Characteristic:

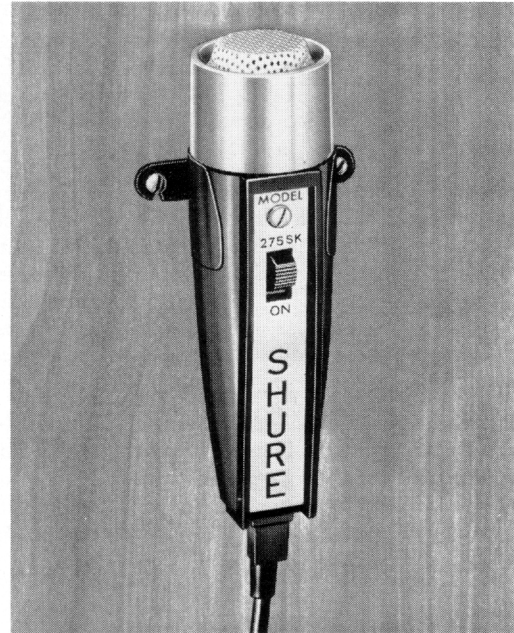
Smooth and uniform from 40 to 10,000 Hz. Free from undesirable peaks. Wide range response is ideal for high quality reproduction of music and voice. Intelligibility and articulate response range is ideal for effective transmission of voice in communication systems.

Polar Pattern: Omnidirectional Voltage Sensitivity:

1.05 millivolts per microbar at end of 7 foot cable across 1 to 5 megohms at 1,000 Hz. (this is equivalent to 59.5 db below 1 volt per microbar).

Recommended Load Impedance: High (1/2 to 5 megohms).

Cable: Attached 7 foot cord, Coiled to 1 foot (0.3 m) extends to 5 (1.5 m) feet. Consists of three conductors (one conductor shielded). Terminates in three leads and one shield.



Finish: Black high impact plastic body with satin anodized cap and grill.

Dimensions: 4-23/32" (119.9 mm) long by 1-11/32" (34.1 mm) diameter.

Weight: New weight 6 ounces (170.1g)
Packaged weight 1 pound 2 ounces (510.3g)

Operation: No polarizing voltage is required for Ceramic microphones. Ceramic microphones may be seriously damaged if accidentally connected to loudspeaker or power supply outlets carrying high voltage. Check your connections carefully. When used near a radio transmitter, use the minimum length of cable consistent with placement requirements. Careful grounding of the cable shield is advisable.

The microphone is controlled by a momentary contact (non-locking) switch, which may be used to control the external relay or switching circuit. For use, grasp microphone in the palm of hand and activate slide-to-talk switch button with thumb.

Connections: The internal switch and cable connections of the Model 275SK Microphone are shown in Figure A. The Switch is a single pole, double throw unit, and may be used to control an external relay or switching circuit.

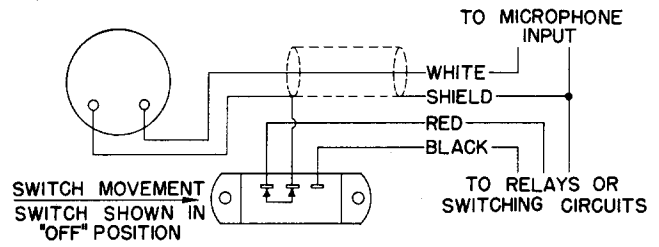
Activation by the microphone switch of CLOSE CIRCUIT TO TALK and/or OPEN CIRCUIT TO TALK relays or switching circuits can be accomplished by proper selection of the control leads terminating the micro-

phone cable. The microphone control leads should be connected to the proper external input of the equipment as provided by the manufacturer for actuating internal relays or switching circuits. (See equipment manual for proper input connections.)

To activate a CLOSE CIRCUIT TO TALK relay or switching circuit connect black lead and shield to the proper input. To activate a OPEN CIRCUIT TO TALK relay or switching circuit connect red lead and shield to the proper input. To activate CLOSE CIRCUIT TO TALK and OPEN CIRCUIT TO TALK relays or switching circuits at the same time, connect the shield, red and black leads to the proper input.

The shield is common to both the microphone and relay or switching circuits. To complete the microphone circuit connections, connect the shield and the white or "hot" lead (shielded conductor) to the proper input. Equipment input resistances of the microphone circuit may be 5 megohms or less. Input resistances may be as low as 1/2 megohm, if necessary, to reduce low frequency response.

The microphone cable shield and equipment should be connected to an earth grounded water pipe (fixed station equipment) or mobile chassis ground to prevent shock hazard during operation of the equipment. If additional length of microphone cable is required with the



use of the 275SK, a three-conductor (one conductor shielded) cable is required to extend both the control and microphone circuits. If the control circuit is not required, a single conductor shielded cable may be used to extend only the microphone circuit. When additional cable is connected, observe precautions listed above and in operation section. Added length of cable will be accompanied by a decrease in output level, with no change in frequency response.

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.

