MODEL 527A

DYNAMIC COMMUNICATIONS MICROPHONE

The 527A microphone is an extremely reliable, high-impedance, dynamic, hand-held microphone with an extended low- and high-frequency response particularly suited to ham radio use, mobile FM transmission, and top-quality paging systems. The microphone has a clear, crisp, and natural voice response. It features professional design, small size, light weight, and modular construction.

The modular construction of the 527A accounts for its tremendous ease of field serviceability. The cartridge, switch, and cable are a modular design, which makes them easily replaceable, if necessary. The microphone is wired so that the wires will not crimp or break.

The unit fits naturally and comfortably in the hand and is not affected by heat or humidity. The exclusive ARMO-DUR® case is immune to oil, grease, fumes, salt spray, sun, rust, and corrosion and is outstanding in its ability to withstand mechanical shocks and vibrations. The “Million-Cycle” leaf-type switch is double-pole, single-throw, designed to withstand severe operating conditions and constant usage.

FEATURES
- Extended low- and high-frequency response
- Highly intelligible voice response
- Unparalleled ruggedness and reliability
- Moving coil (dynamic) element
- ARMO-DUR case
- “Million-Cycle” leaf-type switch controlling microphone and external relay or switching circuits
- Modular construction for easy field service
- “Lifetime” hang-up button and mounting bracket
- Long-life neoprene-jacketed coil cord

APPLICATIONS

The 527A microphone is highly recommended for all types of mobile communications, ham radios, industrial and commercial paging systems, and outdoor public address systems. The 527A is a high-impedance microphone with a high output level, making it suitable for connection to high impedance amplifier inputs when cable lengths of under 50 feet are needed.

INSTALLATION

A mounting bracket for permanent installation is supplied with each microphone. The bracket has mounting holes with clearance for No. 6 or No. 8 screws (see Figure 1).

CONNECTIONS

The internal switch connections of the 527A are shown in Figure 2. The 527A has a three-conductor (1 shielded), coiled cord cable and a double-pole, single-throw, leaf-type switch to control the microphone circuit and an external relay or switching circuit. The WHITE lead is the “hot” conductor for connection to the microphone circuit; the shield is connected to the microphone circuit ground. The microphone circuit of the switch is normally closed, but can easily be modified for normally open operation.
The microphone circuit of the 527A is normally closed when the microphone switch button is in the normal position. The microphone switch may be rewired to have a normally open microphone circuit. To modify the 527A for a normally open circuit, proceed as follows:

1. Remove the three No. 6 Phillips self-threading screws from the back of the microphone case.
2. Separate the case front and back, then remove the microphone switch button.
3. Unsolder or clip the WHITE cable lead and the RED transformer lead from the switch solder lug (see Figure 2).
4. Solder the WHITE cable lead and the RED transformer lead to the lower switch solder lug.
5. Place the microphone switch button in the normal position on the case front. Place the case back on the case front and firmly press the two sections together. Fasten the case back to the case front with the screws previously removed.

OPERATION

The 527A will operate satisfactorily under all ordinary conditions of humidity, heat, and cold. Dropping the microphone or other severe mechanical shocks should be avoided.

SPECIFICATIONS

Type
Dynamic

Frequency Response
200 to 5,000 Hz

Output Level (at 1,000 Hz)
-15 ± 4 dBV/100 μbars

Impedance (at 1,000 Hz)
21 kΩ minimum

Hum Sensitivity
30 ± 5 dB equivalent SPL per 1 mOe

Switch
Double-pole, single-throw, leaf-type

Cable
Attached, 1.5 m (5 ft.), 3-conductor (1 shielded), coiled-retractable, neoprene-jacketed

Dimensions

OVERALL DIMENSIONS

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
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<tbody>
<tr>
<td>55.8 mm</td>
<td>2-1/4 in</td>
<td>1-1/4 in</td>
</tr>
<tr>
<td>19.1 mm</td>
<td>3/4 in</td>
<td>11/16 in</td>
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<td>0.8 mm</td>
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<td>1/32 in</td>
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<tr>
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<tr>
<td>93.7 mm</td>
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<td>1.3 in</td>
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REPLACEMENT PARTS

Cartridge: R131
Switch: RK319S
Cable: C12C
Transformer: 90A4319

For additional service or parts information, please contact Shure’s Service department at 1-847-600-8699. Outside the United States, please contact your authorized Shure Service Center.