HAND-HELD CARBON MICROPHONE

GENERAL
The Shure Model 104C is a small, pressure-actuated, diaphragm-type, carbon microphone specially designed for clear, efficient speech reproduction. The 104C fits naturally and comfortably in the hand, and retains this feel in hot or cold weather. The sturdy, high-impact Armo-Dur case is light and compact, and occupies minimal space in portable or mobile equipment.

The 104C is equipped with a heavy-duty, push-to-talk switch and a long life, rubber-jacketed coil cord cable.

Model 104C Features:

- Frequency response from 300 to 4,000 Hz, specifically designed for voice communications use
- Small, light and compact case, takes minimum space in portable and mobile equipment, fits comfortably and firmly in the hand
- Extremely rugged, high-impact Armo-Dur case, stronger and lighter than die-cast metal, comfortable to the touch in hot or cold weather
- Double-pole, single-throw, leaf-type switch designed to stand up under rigorous operating conditions and constant usage
- Long life, rubber-jacketed coil cord
- Rugged and dependable under all operating conditions

APPLICATIONS
The Model 104C is especially recommended for all types of outdoor and indoor communication activity: in mobile and fixed station use (as in police, fire, utility, forestry and transportation services), and in commercial and industrial applications—including radiotelephone, amateur radio and similar uses. The microphone is also suitable for voice applications in indoor and outdoor public address.

The Model 104C will operate satisfactorily under most conditions of temperature and humidity.

The Model 104C is a replacement for Shure Model 101C, 101E, 102C, 102E, 104A and 104B Carbon Microphones.
<table>
<thead>
<tr>
<th>E (volts)</th>
<th>Total Minimum Circuit Resistance (ohms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>12</td>
<td>200</td>
</tr>
<tr>
<td>24</td>
<td>500</td>
</tr>
</tbody>
</table>

Note that the resistance value includes both resistance R in the figure plus other dc circuit resistance (transformer primary, etc.). The Model 104C will operate satisfactorily with current up to 50 mA. However, no damage will result if the current rises to 100 mA. The resistance of the carbon cartridge is 30 ohms with 50 mA flowing through the cartridge.

**Recommended Operating Current**
- 50 mA (20 mA minimum,
- 120 mA maximum)

**Switch**
- Double-pole, single-throw, leaf-type to control microphone and relay circuits

**Cable**
- Non-detachable, 1.8m (6 ft), four-conductor, coiled cable

**Case**
- Gray high-impact Armo-Dur

**Mounting Bracket**
- Supplied (see Figure 1)

**Dimensions**
- See Figure 5

**SPECIFICATIONS**

**Type**
- Carbon

**Frequency Response**
- 300 to 4,000 Hz (see Figure 4)

**Recommended Load Impedance**
- 50 to 100 ohms

**Actual Impedance**
- 30 ohms (with 50 mA current)

**Output Sensitivity**
- 5 dB below 1V for 100 microbar signal. (Voltage measured across 100-ohm load)

**Net Weight**
- 510 grams (1 lb, 2 oz)

**Shipping Weight**
- 624 grams (1 lb, 6 oz)

**FURNISHED ACCESSORY**
- Mounting Bracket .................RK6MB

**REPLACEMENT PARTS**
- Cartridge .........................R10B
- Cable .........................C15C
- Case Back and Mounting Button Assembly .... .90B601
- On-Off Switch .....................RK6S
- Switch Button ..........................RK3SB

**GUARANTEE**
- This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from the date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor.

**SHIPPING INSTRUCTIONS**
- Carefully repack the unit and return it prepaid to the factory. 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.