**ELECTRET CONDENSER MICROPHONE**

**SPECIFICATIONS**

- **Type:** Electret Condenser Microphone
- **Battery:** EVEREADY No. 206 dry battery, No. E-126 mercury battery or equivalent
- **Power supply:** Normal operating voltage, 9 V DC  
  Minimum operating voltage, 7.5 V DC  
  Current drain: less than 0.5 mA (with battery)  
  less than 5 mA (with external power supply)  
  Battery life: Approx. 500 hours with EVEREADY No. E-206  
  Approx. 1000 hours with EVEREADY No. E-126
- **Accepts external power supply of:** 24–54 V DC
- **Frequency response:** 20–20000 Hz
- **Output level:**
<table>
<thead>
<tr>
<th>Position of the pad switch</th>
<th>Output impedance (Ω)</th>
<th>Effective output level (dBm) *1</th>
<th>Open circuit voltage (dB) *2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>250</td>
<td>-53.8</td>
<td>-74 (0.2 mV)</td>
</tr>
<tr>
<td>-8</td>
<td>250</td>
<td>-61.8</td>
<td>-82 (0.05 mV)</td>
</tr>
</tbody>
</table>
  
  (Deviation ±2 dB)
  *1 0 dBm = 1 mW/10 µ bar, 1000 Hz  
  *2 0 dB = 1 V/µ bar, 1000 Hz
- **Directivity:** Uni-directional
- **Output impedance:** 250 Ω ± 20% at 1000 Hz, balanced
- **Noise level:** S/N ratio more than 46 dB  
  Inherent noise less than 28 dB SPL  
  (0 dB = 2x10^-4 µ bar)
  Wind noise: less than 45 dB SPL (with wind screen)  
  less than 65 dB SPL (without wind screen)
  Induction noise of external magnetic field: less than 5 dB SPL/m gauss
- **Maximum sound pressure input level:** Approx. 132 dB SPL (40–20000 Hz)  
  Approx. 134 dB SPL (100–20000 Hz)
- **Dynamic range:** Approx. 106 dB
- **Capsule:** Electret condenser capsule
- **FET:** Sony conjunction FET
- **Microphone cable:** 0.205" dia., 20 ft (6.1 m)  
  2-conductor cable with a CANNON XLR-3-11C plug
- **Dimensions:** 1.05" dia. x 6.94"  
  (27 mm dia. x 177 mm)
- **Weight:** 6.5 oz (without cable and battery)  
  (180 g)
- **Environmental conditions for preservation temperature:**  
  -4°F ~ 140°F (~-20°C ~ 60°C)
- **Environmental conditions for proper operation temperature:**  
  32°F ~ 122°F (0°C ~ 50°C)
- **Supplied accessories:** Wind screen  
  Microphone holder (NS 1/8")  
  carrying case  
  Microphone cable

*A Wind noise is the value measured by applying a wind velocity of 6.6 ft/second from all directions to the microphone. The mean value is taken and converted to the equivalent input sound level.

*B The external magnetic field induction noise is measured with the microphone placed in the alternating magnetic field of 50 Hz, 1 m gauss. The maximum noise value is taken and then converted to the equivalent input sound level.

**SONY® SERVICE MANUAL**
1. DISASSEMBLY AND REPLACEMENT

1-A. HANDLE GRIP REMOVAL

- **Note:** When removing the handle grip, do not touch the diaphragm of the capsule.

1-B. CAPSULE REPLACEMENT

- **1.** Remove the capsule to a distance of 1 cm
- **2.** Insert the capsule up to the frame
- **3.** Fix the capsule as illustrated.

1-C. CIRCUIT BOARD REMOVAL

- **1.** Remove the handle grip and capsule.
- **2.** Unsolder four lead wires at the circuit board.

- **6.** Remove the handle grip as shown by arrow.
1-D CONNECTOR SLEEVE REMOVAL

1. Remove the microphone grip referring to handle grip removal.
2. 2-503.234-00 screw
3. pull
4. Unsolder four lead wires at negative battery contact.
5. 2-503.234-00 screw
6. lift up

1-E CONNECTOR SWITCH REPLACEMENT

1. Unsolder three lead wires referring to connector sleeve removal.
2. battery holder
3. spacer connector switch
4. connector sleeve

1-F SWITCH REPLACEMENT

1. Remove the chassis referring to circuit board replacement.
2. Unsolder the lead wires.
3. @P 2x2

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VIO
BLU
BRN

Circuit board

slide switch
Cut corner of slide switches should be placed as shown by arrow.
2. DIAGRAMS

2-A. SCHEMATIC DIAGRAM

Note: All resistors and capacitors are in \( \mu F \) unless otherwise specified.

![Schematic Diagram]

2-B MOUNTING DIAGRAM

- Conductor Side -

![Mounting Diagram]
3. EXPLODED VIEW

Note: Parts without part numbers and names are not available.
4. PACKING

Note: Parts without part numbers and names are not available.