# **Product Specifications**

# **SM137 Cardioid Condenser Microphone**

#### Overview

The SM137 is a versatile, flat-response cardioid condenser probe microphone with an ultra-thin diaphragm for a frequency response that combines a smooth high-end with a tight, controlled low-end and a -15db pad for natural sound reproduction in both acoustic and high volume performance

#### **Features**

- Cardioid polar pattern to reduce the pickup of unwanted sounds Ultra-thin, 2.5  $\mu$ m 24 karat gold-layered, low mass Mylar® diaphragm for superior transient response
- Class A, discrete, transformerless preamplifier for transparency, extremely fast transient response, no crossover distortion, and minimal harmonic and intermodulation distortion
- Premium electronic components, including gold-plated internal and external connectors
  Two-position switchable pad (0 dB and 15 dB) for handling extremely high sound pressure levels (SPLs)

#### **Available Models**

| SM137 | Includes a Swivel Adapter and a Zippered Pouch |
|-------|--|
|       |  |
|       |  |

### **Specifications**

| Туре  | Electret Condenser  |
|---|---|
| Frequency Response  | 20 to 20,000 Hz   |
| Polar Pattern   | Cardioid  |
| Impedance   | 150 Ω (actual)  |
| Sensitivity<br>(at 1 kHz, open circuit voltage)             | −41 dBV/Pa<br>1 Pascal=94 dB SPL  |
| Maximum SPL<br>(1 kHz, < 1% THD)                            | $1000~\Omega$ load: 139 dB (154 dB, Pad on) 2500 $\Omega$ load: 144 dB (159 dB, Pad on)   |
| Signal-to-Noise Ratio<br>(referenced at 94 dB SPL at 1 kHz) | 75 dB<br>S/N ratio is difference between 94 dB SPL and equivalent SPL of self noise, A-weighted   |
| Dynamic Range<br>(at 1 kHz)                                 | 1000 Ω load: 122 dB<br>2500 Ω load: 128 dB  |
| Common Mode Rejection<br>(20 Hz to 20 kHz)                  | > 50 dB   |
| Clipping Level<br>(20Hz-20 kHz at 1% THD)                   | 1000 Ω load: 3 dBV<br>2500 Ω load: 9 dBV<br>THD of microphone preamplifier when applied input signal is equivalent to cartridge output at specified SPL |
| Self Noise<br>(typical, equivalent SPL, A-weighted)         | 19 dB   |
| Polarity  | Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3   |
| Weight  | Net: 195 g (8.9 oz.)  |
| Switch  | Attenuator: –15 dB  |
| Dimensions  | 162 mm (6.375 in.) L x 24 mm (0.950 in.)  |
| Connector   | Three-pin professional audio (XLR), male  |
| Power Requirements  | 48 Vdc phantom, 5.2 mA  |

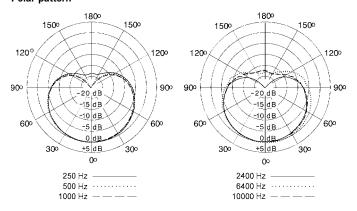


SM137

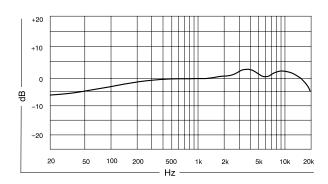
# **Optional Accessories and Replacement Parts**

| Shock Stopper™ Isolation Mount | Isolation Mount |  |
|--------------------------------|-----------------|--|

# Polar pattern



## Frequency response





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