# **Product Specifications**

# SM94 Cardioid Condenser Microphone

### Overview

The SM94 is a rugged, versatile flat-response cardioid condenser microphone, designed with a frequency response free of either presence peaks or low-end rolloffs, for use with live amplified and acoustic instruments. Additionally, the SM94 can be powered from one AA battery or phantom power, for remote recording applications and environmental conditions.

#### Features

- A sensitive mic with a wide, flat response ideal for live amplified and acoustic instruments.
- Extremely well-suited for reproduction of stringed instruments, woodwinds and cymbals
- AA battery or phantom power
- Internal shock mountWide dynamic range
- Wide dynamic range
  Smooth, flat frequency response
- Uniform Cardioid condenser
- Frequency response: 40 to 16,000 Hz

#### **Available Models**

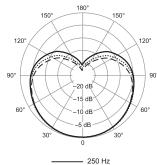
Includes Stand Adapter and Zippered Pouch

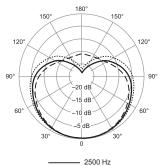
## Specifications

Туре	Condenser
Frequency Response	40 to 16,000 Hz
Polar Pattern	Cardioid
Sensitivity (at 1,000 Hz)	Open Circuit Voltage: –49 dBV/Pa (3.5 mV) (phantom) –50 dBV/Pa (3.2 mV) (battery) (1 Pa = 94dB SPL)
Impedance	Rated at 150 $\Omega$ ; 200 $\Omega$ actual
Output Clipping Level (1 kHz, 3% THD)	800-Ω Load–14 dBV (0.63 V) (phantom), 1% THD; –23 dBV (0.71 V) (battery), 3% THD
Total Harmonic Distortion	< 0.25% (130 dB SPL at 250 Hz into 800 $\Omega$ load)
Maximum SPL	800 Ω Load: 141 dB (phantom), 123 dB (battery)
Hum Pickup	-3 dB equivalent SPL in a 1 millioersted field (60 Hz)
Output Noise (equivalent sound pressure levels; measured with true rms voltmeter)	22 dB typical, A-weighted 25 dB typical, weighted per DIN 45 505
Dynamic Range	119 dB (phantom); 101 dB (battery) (maximum SPL, 2000– $\Omega$ load, to A–weighted noise level)
Signal-to-Noise Ratio	72 dB (IEC 651)* at 94 dB SPL
Overvoltage Protection	Maximum External Voltage Applied to Pins 2 and 3 with respect to Pin 1: +52Vdc Reverse polarity protected to 75 Vdc
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3
Power	Supply Voltage: 11 to 52 Vdc, (+) pins 2 and 3 Current Drain: 1.0 to 1.2 mA max. at 52 Vdc
Battery Operation	Type: 1.5 V alkaline, AA size (NEDA 15A) Life: Up to 5,000 hours with fresh battery
Connector	XLR professional audio 3-Pin
Case	Steel and brass construction with gray finish and stainless steel mesh grille
Net Weight	250 grams (8.8 oz) less battery

# **Optional Accessories and Replacement Parts**

A25D	Microphone Clip	A15AS	Switch-Selectable Attenuator	A53M	Isolation Mount
A3WS	Microphone Windscreen	_			





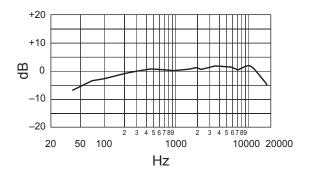
----- 2500 Hz ----- 6300 Hz ----- 10000 Hz

Polar Pattern



----- 500 Hz

- - - - 1000 Hz



Frequency Response

SM94