# DEDUCTION®

## **M418**

## HYPERCARDIOID CONDENSER GOOSENECK MICROPHONE



m418 is a wide-range miniature condenser microphone with a hyper cardioid polar pattern. It is designed for quality sound reinforcement, professional recording, Television and other demanding sound pickup applications. The small-diameter double goose neck design permits highly flexible positioning while maintaining a smooth, well contoured appearance. An included snap-on foam windscreen effectively reduces wind noise and "popping."

The M418 is equipped with Uniguard RFI-shielding technology, which offers outstanding rejection of radio frequency interference (RFI). The microphone is RoHS compliant – free from all substances specified in the EU directive on hazardous substances.

The microphone's hypercardioid polar pattern provides a 100° angle of acceptance. Additional interchangeable elements with omni directional (360°), cardioid (120°) and Microline (90°) pickup patterns are available.

The integral power module can be powered from any external 11V to 52V DC phantom power supply. A recessed switch in the power module permits choice of flat response or low-frequency

roll-off (via integral 80 Hz high-pass Unisteep filter) to help control undesired ambient noise.

The microphone is enclosed in a rugged housing with a lowreflectance black finish. It features an XLRM-type connector insert at its base, allowing it to be plugged directly into an XLRF-type panel jack or microphone cable. An AT8474 low-profile isolation mount or AT8473 stand clamp is optional to permit attachment of the XLR mic base to a standard %"-27 or %"-16 threaded mic stand or mounting flange

The M418 stands 457.2 mm from the table or podium. The model output is low impedance balanced. The output connector mates with XLRF-type cable connectors. The balanced signal appears across Pins 2 and 3, while the ground (shield) connection is Pin 1. Output is phased so that positive acoustic pressure produces positive voltage at Pin 2, in accordance with industry convention.

The integral 80 Hz high-pass Unisteep filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations. To engage the Unisteep filter, use the end tip of a paper-clip or other small pointed instrument to slide the switch toward the "bent" line.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed 43°C for extended periods. Extremely high humidity should also be avoided.

### **SPECIFICATIONS**

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Hypercardioid
FREQUENCY RESPONSE	80-20,000 Hz
LOW-FREQUENCY ROLL-OFF	80 Hz, 18 dB/octave
OPEN CIRCUIT SENSITIVITY	-40 dB (10.0 mV) re 1V at 1 Pa
IMPEDANCE	250 ohms
MAXIMUM INPUT SOUND LEVEL	138 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical)	109 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	65 dB, 1 kHz at 1Pa
SWITCHES	Flat, roll-off
PHANTOM POWER REQUIREMENTS	11-52V DC, 4 mA typical
WEIGHT	135 g
DIMENSIONS	457.2 mm - long 8.4 mm - head diameter, 18.9 mm - base diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8109 two-stage foam windscreen
OPTIONAL INTERCHANGEABLE ELEMENTS	ESE-O omnidirectional (360°) ESE-C cardioid (120°) ESE-ML Microline (90°)



#### **Optional Accessories:**

AT8474 universal isolation mount. AT8473 quick-mount stand adapter. AT8506 four-channel 48V phantom power supply (AC powered). AT8668 quick-mount plug-in microphone desk stand. AT8801/EU single-channel 48V phantom power supply (AC powered).

