

# ATM250DE

ARTIST SERIES™

## DUAL-ELEMENT INSTRUMENT MICROPHONE



- Audip-Technica's proven dual-element design features two elements (condenser and dynamic) enclosed in a single housing.
- Neodymium dynamic element provides punch and attack, while the condenser element captures the full audio spectrum.
- Elements are positioned in a perfect phase relationship, something practically unachievable with two separate microphones.
- Perfect for kick drum, guitar amps and instrument use.
- Integral 80Hz HPF switch and 10 dB pad (condenser element).
- Versatile mounting options and effective dampening of mechanical noise thanks to included AT8471 isolation clamp.
- Corrosion-resistant contacts from gold-plated XLRM-type connector.
- Rugged, all-metal design and construction for years of trouble-free use.

The ATM250DE is intended for use in professional applications where remote power is available. It required 11V to 52V DC phantom power only to the condenser output of the supplied cable.

Output from the microphone's 5-pin XLRM-type connector is low impedance (Lo-Z) balanced. The included 5.0 m shielded cable features a 5-pin XLRF-type input connector and two standard 3-pin XLRM-type output connectors. The balanced signals appear across Pins 2 and 3 (condenser) and Pins 4 and 5 (dynamic). Pin 1 is ground (shield). Output is phased so that positive acoustic pressure produces positive voltage at Pin 2 and 4.

To avoid phase cancellation and poor sound, all mic cables must be wired consistently: Pin 1-to-Pin 1, etc.

An integral 80Hz hi-pass filter on the condenser element 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.

The ATM250DE's condenser element is also equipped with a switchable 10 dB pad that lowers the microphones's sensitivity, thus providing higher SPL capability for flexible use with a wide range of performers and system configurations.

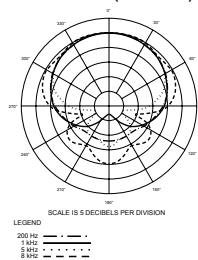
The ATM250DE includes an AT8471 isolation clamp to provide secure mounting, versatile positioning and effective dampening of unwanted mechanical noise.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed 40°C for extended periods. Extremely high humidity should also be avoided. Take care to keep foreign particles from entering the windscreen. An accumulation of iron or steel filings on the diaphragm, and/or foreign material in the windscreen's mesh surface, can degrade performance.

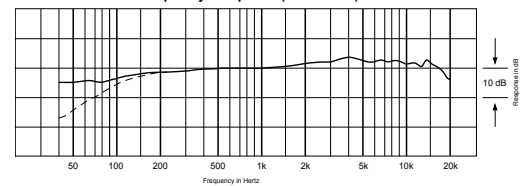
### SPECIFICATIONS

ELEMENT	Condenser, dynamic
POLAR PATTERN	Cardioid (condenser) Hypercardioid (dynamic)
FREQUENCY RESPONSE	40-20,000 Hz (condenser) 40-15,000 Hz (dynamic)
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave (condenser)
OPEN CIRCUIT SENSITIVITY	-49 dB (3.5 mV) re 1V at 1 Pa (condenser) -53 dB (2.2 mV) re 1V at 1 Pa (dynamic)
IMPEDANCE	50 ohms (condenser) 600 ohms (dynamic)
MAXIMUM INPUT SOUND LEVEL	148 dB SPL, 1 kHz at 1% T.H.D. (condenser)
DYNAMIC RANGE (typical)	122 dB, 1 kHz at Max SPL (condenser)
SIGNAL-TO-NOISE RATIO	68 dB, 1 kHz at 1 Pa (condenser)
PHANTOM POWER REQUIREMENTS	11-52V DC, 3.5 mA typical (condenser)
SWITCHES	Flat, roll-off; 10 dB pad
WEIGHT (less cable and accessories)	320 g
DIMENSIONS	143.6 mm - long, 55.0 mm - diameter
OUTPUT CONNECTOR	Integral 5-pin XLRM-type
CABLE	5.0 m dual shielded, 8-conductor cable, 5-pin XLRF-type connector at microphone, two 3-pin XLRM-type output connector
ACCESSORIES FURNISHED	AT8471 isolation clamp for 5/8"-27 threaded stand; 5/8"-27 to 3/8"-16 threaded adapter; Soft protective pouch

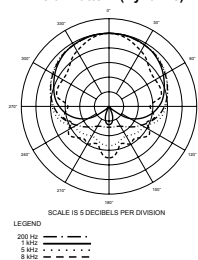
Polar Pattern (Condenser)



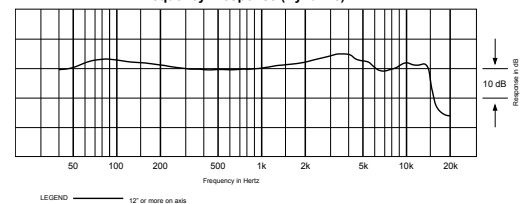
Frequency Response (Condenser)



Polar Pattern (Dynamic)



Frequency Response (Dynamic)



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FORM No. ATGC-L0032-06-E

# ATM250DE

ARTIST SERIES™

## 双元件乐器收音话筒



- 双元件收音设计，在一个话筒中设有电容及动圈收音，提供创新的声音传感技术。
- 在电容式收音头提供清晰收音的同时，动圈收音头补充了丰满的节拍感。
- 收音元件的位置设计，有完美的相位联系，并非随便并合两支话筒就可造出的效果。
- 适合于小鼓、结他功放及其他乐器收音用途。
- 内置80Hz高通滤波器及10dB衰减(电容收音头)。
- 配有防震话筒夹AT8471，提供稳固的安装，及调校夹持位置，并能有效减低机械性噪声。
- 抗腐蚀的镀金XLRM卡农输出头。
- 全金属结构，坚固、耐用、可长期使用。

ATM250DE应用于专业收音工作，电容收音头需要提供11V至52V幻象供电于专用接线上，可使用调音台上的幻象电源。

话筒输出端为5针脚的XLRM卡农公头，并为低阻抗平衡输出，配有5米长专用连接线，由5针脚XLRM卡农母头转接为两路3针脚XLRM卡农公头输出。话筒音频信号以卡农公头的2号及3号针脚(电容收音头)及4号及5号针脚(动圈收音头)输出，而1号针脚则为地线(屏蔽)连接。输出相位以正相位电平于2号及4号针脚上。

为避免出现相位相互抵消而失真的情况，所有话筒连接时，接线必需以1-1, 2-2, 3-3型式把针脚连接。

内置高通滤波电路，可轻易由平直的频率响应，开启为于80 Hz以下衰减的收音效果，应用高通滤波器可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

话筒的电容收音头设有10dB衰减开关，在高声压环境收音时，避免破声的失真现象出现，提供更广的使用环境。

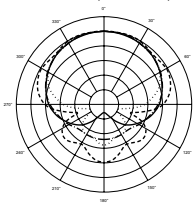
ATM250DE配套有AT8471防震话筒夹，提供稳固的安装，及可调校夹持位置，能减低机械性的震动及噪声。

把话筒暴露于高温中可能导致输出电平逐渐及永久性减弱，应避免将话筒留在日晒的地方或长时间置于温度超过43°C的地方，而极高湿度也应避免。另外，小心不要把金属碎或铁屑掉进防风罩内，铁屑会吸进收音头磁铁中，或贴在防风罩内，将会影响及减低收音效果。

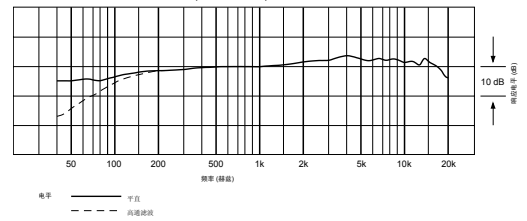
### 技术指标

收音头	电容式，动圈式	
指向特性	(电容式)	心形指向性
	(动圈式)	超心形指向性
频率响应	(电容式)	40-20,000 Hz
	(动圈式)	40-15,000 Hz
高通滤波	(电容式)	80 Hz, 12 dB/octave
开通灵敏度	(电容式)	-49 dB (3.5 mV) 以 1V 于 1 Pa
	(动圈式)	-53 dB (2.2 mV) 以 1V 于 1 Pa
输出阻抗	(电容式)	50 欧姆
	(动圈式)	600 欧姆
最大承受声压	(电容式)	148 dB 声压, 1 kHz 于 1% T.H.D.
动态范围 (典型)	(电容式)	122 dB, 1 kHz 于最高声压
讯噪比	(电容式)	68 dB, 1 kHz 于 1 Pa
幻象供电	(电容式)	直流 11-52V, 耗电 3.5 mA 典型
开关	(电容式)	高通滤波; 10 dB 衰减
重量	320 克	
外形尺寸	143.6 mm - 长度, 55.0 mm - 直径	
输出连接器	内置XLRM-5针卡农公头	
连线	5.0 m - 长, 双屏蔽8芯连接线, 话筒端XLRM-5针卡农母头, 输出端为两组XLRM-3针卡农公头。	
附属品	AT8471 ½"-27接头防震话筒夹, ½"-27至¾"-16转接头, 保护袋。	

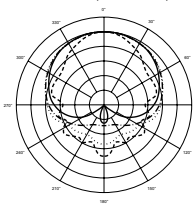
指向特性 (电容收音头)



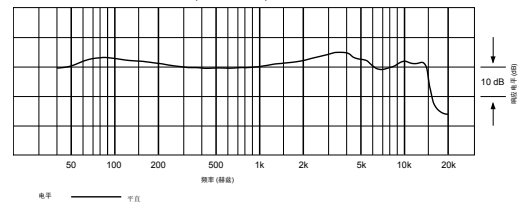
频率特性 (电容收音头)



指向特性 (动圈收音头)



频率特性 (动圈收音头)



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