

Choosing the Right Cartridge

The ultimate performance potential of any record playing system is defined by the capabilities of the phono cartridge. Tonal balance, response range, clarity on musical peaks, stereo separation and imaging, and freedom from noise and distortion are all affected at the outset. Your choice of cartridge can affect the life of your records. With vinyl records becoming more and more difficult to replace, it's an important point to keep in mind when selecting a cartridge or upgrading your system.

What's the Difference in Styli?

Audio-Technica offers three different diamond stylus shapes:



MicroLine™



Elliptical



Conical

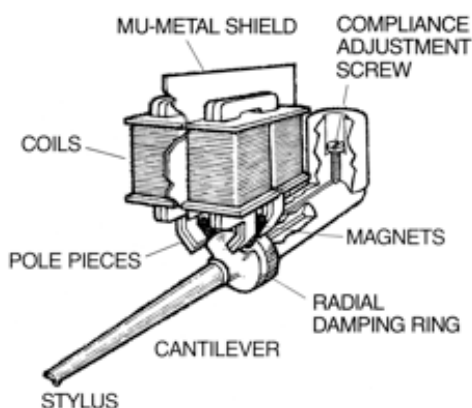
The MicroLine stylus almost exactly duplicates the shape of the cutting stylus used to produce the original master disc. This enables it to track portions of the groove other styli cannot reach, resulting in extremely accurate tracing of high frequency passages and ruler-flat frequency response within the audible range. The unique multi-level shape wears more evenly, allowing greatly extended record and stylus life.

The elliptical stylus has two radii, the front radius being wider than the side radius. This allows the stylus to ride in the centre of the groove, like the conical while the smaller side radius can more accurately track higher frequencies.

The conical stylus is the simplest, least expensive and most widely used stylus. Its spherical tip, which has a typical radius of 0.7 mil, normally touches the centre of the record groove walls. The conical design works best in moderate to lower priced, and older, record players with higher tone arm tracking forces.

Dual Moving Magnet

The AT440MLa is the finest moving magnet cartridges. It features the Vector-Aligned Dual Magnet design, MicroLine stylus and Audio-Technica's exclusive Paratoroidal Signal Generator.

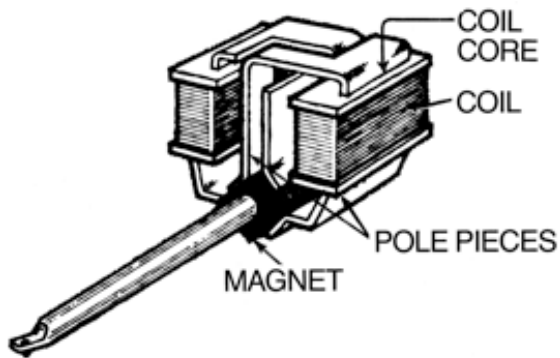


This unique signal generating system is composed of a unified, laminated coil core wound with a single piece of wire. Internal mechanical and electrical connections are eliminated, minimising magnetic losses and assuring better signal transfer.

The use of PCOCC wire (Pure Copper by Ohno Continuous Casting), a special copper with virtually no transverse crystal barriers to impede signal transmission, perfects the performance of the advanced paratoroidal coil design. Thus, the coils of the AT440MLa transmit distortion-free sound in which even the most subtle sonic details are reproduced with clarity and purity.

Dual Moving MicroCoil™

The OC9MLII possesses the basic A-T Vector-Aligned design, but utilises two tiny moving coils mounted at 90 degrees in place of the two moving magnets.

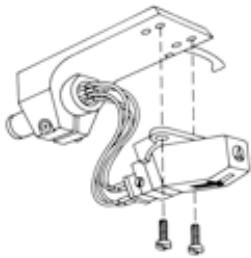


Many serious audiophiles prefer moving coil designs, citing clarity and transparency of tone, better defined transients, precise stereo imaging and lower distortion as the reasons for their preference. (Please note that moving coil cartridges require receivers or preamps with special compatible inputs. Also, their stylus assemblies are not field-replaceable.)

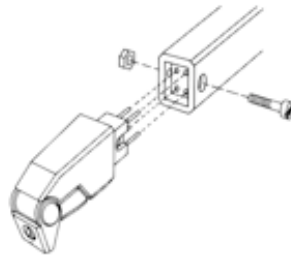
The OC9MLII features a MicroLine stylus, PCOCC coil windings for low-loss signal transmission, a high-flux samarium cobalt magnet and a low-resonance, gold-plated boron cantilever.

A Word About Mounts

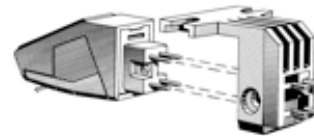
Audio-Technica cartridges are designed with one of three mounting options: the P-mount (plug-in), the half-inch (1/2") mount, or the universal mount



P-mount



Half-Inch mount



Universal mount

A P-mount cartridge has four terminals at the back that simply plug in to the end of the tone arm. The cartridge is then secured to the tone arm with a single screw.

A half-inch mount cartridge also has four terminals at the back, but they are larger pins that connect to four individual wires at the end of the tone arm. The cartridge is secured to the tone arm's headshell with two screws, spaced 1/2" apart.

An A-T universal mount model is a P-mount cartridge with an included half-inch adapter bracket. It is thus compatible with both P-mount and half-inch mount tone arms.