

# A Tough Combo to Beat

## *The Analysis Plus Silver Oval-In Interconnects*

BY RUFUS SMITH

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**T**he theory behind Analysis Plus' Silver Oval-In Interconnects flies in the face of conventional audio wisdom. Not only do the Silver Oval-In Interconnects sound good - they measure well, too.

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Founded in 1993, Analysis Plus is a leader in the field of electronic systems and components. The firm's customer base includes Motorola and Ford Motor Company, in addition to several high-end audio cable (and speaker) manufacturers. Over the years, AP developed several software models to aid in predicting how audio cables will operate according to the established laws of physics. After extensive R&D, the staff at AP, all of whom have advanced degrees in electrical engineering or physics, concluded that many audio cables don't work as claimed. So, they decided that they could improve upon today's state-of-the-art cable designs.

As we are all aware, the majority of today's most popular audio cables are based upon cylindrical/round wires. According to the folks at AP, cylindrical cables are, unfortunately, beset with a host of problems including current bunching and skin effect. Current bunching as defined by AP occurs "when a pair of cylindrical conductors' return current (flowing away from the load) tends to flow as closely as possible to the supply current (flowing toward the load)." The major effect of current bunching, according to AP, is "that current flow will therefore not be uniform at high frequencies."

Skin effect, on the other hand, occurs when-as a result of magnetic fields produced by current flowing through a conductor-the current tends to concentrate near the surface of the conductor. As the frequency increases, more of the current is concentrated closer to the surface of the conductor; therefore, the cross-section through which the current flows is decreased, and this increases the effective resistance.

After countless computer simulations and other exhaustive tests, the AP engineering team reached an innovative

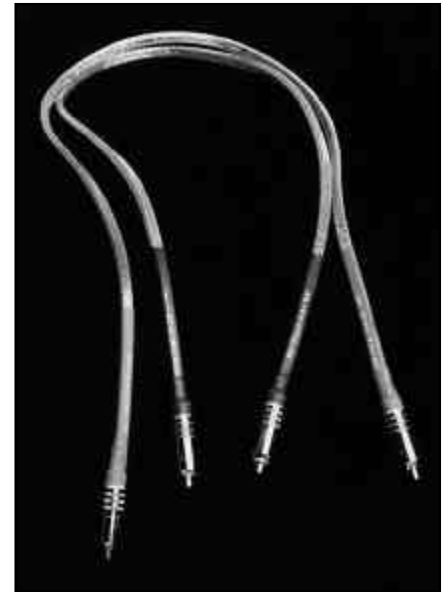
solution: cables utilizing a hollow oval geometry. The principal advantage of an oval conductor is that its shape allows for a reduction in the negative effects of current bunching by allowing more of the return current to be closer to the outgoing current.

In addition to the radical hollow oval conductor design, the AP design team also found that a braided configuration was far superior to solid core. To begin with, a braided design is more mechanically reliable than solid core conductor designs. Woven cables are less susceptible to damage from kinks and other deformations when handled. Next, the cable's weaving pattern and resultant conductor spacing results in the current density being evenly distributed among the individual strands. Thus, the Oval cable's resistance is constant over a wide variety of frequencies.

### THE SOUND

One of my pet peeves as an audio reviewer is the extraordinarily long break-in times required by most audio equipment. Among the worst offenders: new silver cables. Fresh out of the box, most silver cables are so bright that they are virtually unlistenable. Not looking forward to spending several weeks breaking in these cables. I borrowed an audiobuddy's MOBIE (see review, *Ultimate Audio*, Vol. 3, No. 3, Fall 1999) and let the Silver Oval-Ins cook for a week before replacing my reference Harmonic Technology cable. Was the wait worth it? Read on.

To say that the AP cables proved a revelation in my system is an understatement. The PASS electronics and WATT/Puppies excel when it comes to transparency and an ability to resolve the finest minutiae found on a recording-and inserting the Silver Oval-Ins interconnects took the system's



performance in these two critical areas up another notch. Details lost in the depths of the recording were revealed with greater clarity. Forgive the use of a tired cliché-I must say that inserting the AP cables into the system really lifted another veil between the listener and the musical event.

The AP interconnect is an exceptionally balanced wide bandwidth cable. No single part of the frequency is emphasized over another. The Silver Oval-In offers excellent bass and superb high frequency extension. The midrange is to die for with an incredible sense of palpability and realism. Sound -staging-in particular, the WATT/Puppy's outer stage limits on both analog and digital sources-was considerably wider than with the Harmonic Technology. Dynamics are right in there with the best cables I have auditioned.

In a world where cable prices are going through the roof, the design team at AP wanted a cable that was real world in price. At \$630 per meter pair, the Silver Oval-Ins-are very affordable. To boot, the cable measures well, sounds even better and is affordable. Sounds like an unbeatable combination tome.

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*Price: \$630 per meter pair/\$350 per additional meter.*