



Spectral Audio, Inc.
442 Oakmead Parkway
Sunnyvale, California 94086
408.738.8521 Fax: 408.738.8524

Bulletin 9501

Product Overview

Introducing the New Generation Spectral/MIT Cables

In the early 1980s, a joint development effort between Spectral Audio and Music Interface Technologies (MIT) resulted in the first time-aligned audio cables for use with high-speed audio components. The Spectral MI-500 Interconnect and MH-750 Speaker Cable completed the performance envelope of the Spectral electronics and became instant classics.

The Spectral/MIT collaboration represented the first fully integrated, ultralinear system of active components and passive cable networks in audio. By working with MIT to develop measurement techniques to observe minute noise and phase distortions in signal cables, Spectral was able to create an integrated system of electronics and optimized cables which was truly accurate in the time domain. Whereas these types of tuned systems have been routine in radio and microwave design, the Spectral/MIT venture led the way in introducing this important system concept to High-End audio.

Since the introduction of the original MIT/Spectral cables, successive stages of development have further optimized the component—component and the component—speaker interface. Breakthrough cable networks such as MI-500 and MH-750 Shotgun, CVT and finally Terminator have been designed around Spectral's audio components and have earned MIT worldwide recognition as the premiere high-end cable specialists. The combination of these cables with

Spectral's ultralinear high-speed circuitry represents the most uncompromising implementation of the MIT technology.

The Ultralinear Spectral System

The dc coupled, high-speed amplifier circuitry developed for Spectral audio components offers many practical advantages over conventional audio amplifier design, from superior transient accuracy to lower time based distortions and phase noise. In Spectral components this "ultralinear" circuit capability translates into improved linearity for greater resolution of a musical event occurring in a distinctive acoustic space.

Uncompromising audio circuitry must be extremely wideband, but wideband output can broadcast like a transmitter, to produce megahertz oscillations which ring and distort the audio signal. To prevent oscillations in the Spectral system, conventional "wire" cables have been replaced with precision tuned cable "networks" developed by MIT. The modular terminations of the MIT cables tune them to function like ideal low-pass filters, the perfect match for Spectral's high-speed, high-resolution circuitry. Tuning for ultra-high frequency roll-off achieves the best of both worlds — very fast rise and settling time in the audio circuitry for exceptional signal resolution, and precise bandwidth tailoring for absolute amplifier stability and RFI isolation. Integrating MIT cable networks with Spectral wideband components easily outperforms conventional bandwidth limited audio components and wire cable combinations in virtually all domains.

The Spectral Ultralinear Cables

Now after a decade of development experience with the MIT network technology, a new generation of cables designed by Bruce Brisson for Spectral systems is available. The Spectral Ultralinear series cables simplify system building with optimized interconnect /

speaker cable pairs to support foundation as well as reference level applications. The ultralinear cables also represent fine value in the Spectral tradition, providing performance associated with far more costly networks.

Spectral MI-330 Ultralinear Interconnect

The Spectral MI-330 Ultralinear interconnect cable is the foundation choice for component interface in the Spectral system. MI-330 Ultralinear has been designed to offer maximum performance and sonic sophistication with an emphasis on high value. As a dedicated Spectral cable network, the MI-330 UL assures the precision time alignment and critical impedance matching that Spectral components require. The overall performance envelope of considerably more expensive MIT interconnects has been achieved in the MI-330 Ultralinear with exceptional balance and musicality. The Spectral MI-330 UL is also the ideal match to the MH-750 Ultralinear speaker cable and combines with the Spectral components for a powerfully real and transparent resolution of the source. Especially well suited for long interconnect runs between preamplifier and amplifier, the MI-330 UL is an excellent choice for all low level applications in the Spectral system.

Spectral MH-750 Ultralinear Speaker Cable

The Spectral MH-750 Ultralinear cable is the foundation choice for speaker interface with Spectral high-speed amplifiers. MH-750 Ultralinear has been designed to offer maximum overall performance with an emphasis on high value. The MH-750 UL is a dedicated Spectral cable network which assures the precision time alignment, critical termination and tuned roll-off required for stable operation of Spectral's megahertz amplifier designs. This proprietary tuning of MH-750 UL gives Spectral amplifiers broad stability margin into the most complex and difficult speaker loads. As a result, MH-750 UL achieves the overall performance envelope of more expensive MIT cables for exceptional sonic balance and inner life. MH-750 Ultralinear is the perfect match for the MI-330 Ultralinear interconnect and combines with Spectral components for powerfully real and transparent reproduction. The Spectral MH-750 Ultralinear cable repre-

sents the finest balance of performance and value yet in the Spectral system.

Spectral MI-350 Ultralinear Interconnect

The Spectral MI-350 Ultralinear interconnect cable is our reference component interface in the Spectral system. MI-350 Ultralinear has been designed to offer reference level performance with Spectral components and introduces the new generation 350 series MIT design optimized for our exclusive applications. The MI-350 Ultralinear draws upon a decade of advancements made in the Spectral MI-500 series interconnects which culminated in the world-recognized MI-500 CVT/Terminator. The new generation Spectral MI-350 advances the leading edge tradition of the MI-500 series with remarkable improvements in overall performance and value. All the patented design features pioneered in MIT reference cables are optimized for the Spectral system in MI-350 Ultralinear for a new level of quietude and transparency. MI-350 Ultralinear is the ideal match for the Spectral MI-770 Ultralinear speaker cable and Spectral's reference series of high-resolution audio components. As an investment in sonic excellence and exceptional value, MI-350 Ultralinear will compliment any Spectral system.

Spectral MH-770 Ultralinear Speaker Cable

The Spectral MH-770 Ultralinear speaker cable is our reference speaker interface in the Spectral system. MH-770 Ultralinear has been designed to offer reference level performance with Spectral amplifiers and introduces the new generation 770 series MIT design optimized for our ultralinear application. MH-770 Ultralinear is inspired by a decade of advances made in the Spectral MH-750 series speaker cables which culminated in the world recognized MH-750 CVT/Terminator. The new generation Spectral MH-770 continues this leading edge tradition with significant improvements in performance and value. All of MIT's patented design features are optimized for the Spectral system in the MH-770 Ultralinear for a new level of accuracy and realism. MH-770 Ultralinear is the ideal match for Spectral's reference series of high-resolution audio components. The MH-770 Ultralinear is a solid advancement in sonic excellence and value and will compliment any Spectral system.