

REFERENCE LEVEL SPEAKER INTERFACES AND INTERCONNECTS

(or-a-cle), or a-kl, n. A place where hidden knowledge is believed to be revealed; the agency that does the revealing, or what is revealed; a revelation or divine utterance for the guidance of man, or the one who does such revealing; the wisdom of the prophets.

The Future of Audio Interfacing is Here - The Oracle V3.1

The Oracle, speaker interfacing as it will be. A revelation of what is to come. A redefinition.

With this new product MIT has not only created the worlds most technically advanced interface to date, but has also advanced interface aesthetics and connection convenience into the next millennium. The Oracle redefines the state-ofthe-art in speaker cables breaking new ground in all aspects of audio interfacing, setting new marks in performance and appearance in a completely modular, fully upgradeable and fully customizeable package.

Legendary Performance

For more than 15 years MIT has been designing and building the highest performance interfaces in High-End audio. MIT interfaces utilize numerous technological advances developed and patented by Bruce Brisson (MIT's founder) through years of tests and measurements. The Oracle Series is the result of this ongoing research and are the latest products to benefit from this long line of truly revolutionary performance innovations.

Evolutionary Design

Modularity and upgradeability in an aesthetically striking presentation— The V3.1 incorporates a modular design and fully updated network topology. This new design consolidates all of the networks into one easyto-handle network housing which sits neatly behind the speaker. The cable is then attached via a union connector on the input side of the billet aluminum enclosure. This enables the user to simply locate the network housings and then attach the cable, providing a simple, clean and elegant presentation. Finally, the Oracle design was created with upgrade flexibility in mind—new technology and configuration changes



are now simple and easy to perform, protecting your investment and allowing for years of future-proof performance and enjoyment.

Multiple Versions of Oracle V3.1

Because of differences between various brands and models of electronics, the Oracle V3.1 is available in Wide, Ultra-Wide and EX wide bandwidth versions. All versions of Oracle V3.1 are also available in singleended or bi-wire versions. Ask your MIT Dealer to recommend the one that is right for you.

Switchable Impedance Interconnects

The Oracle V3.1 interconnects feature the the same compact design (and performance) of the acclaimed 350 Shown:

V3.1 Balanced

with selectable

Interconnect

Oracle, plus the addition of new switchable impedance networks. The end-user can now tune the cable to maximize performance for each components specil ic input impedance, change between low 50k), medium (40-100k), or high (ov 90k) impedance with a simple flick of a

switch. Perfect for use with Oracle V3.1 Speaker cable.



What you can expect from the Oracle V3.1

Better Bass

Powerful, accurate bass has long been a defining characteristic of high fidelity sound reproduction. However, few audiophiles recognize the importance of the interface in achieving realistic bass. The MIT networks deliver tight, full bass response, with proper weight, speed, and tonal accuracy. Even more importantly, the Oracles are the only interfaces available today with the ability to create images of bass instruments that are properly located in all three axes — width, height, and depth. The Oracle V3.1 delivers bass that is rich and powerful, without the mushy, muddy quality that is so often heard with ordinary cables.

Clearer Midrange

The midrange is the heart of superior sound quality. Here is where loss of clarity and detail, as well as added distortions, become most apparent. MIT's networks preserve precise articulation across the full audible spectrum and create a noise-free, velvety background against which musical details emerge with astonishing clarity. As in the bass range, lifelike, accurately-sized images of instruments and voices are precisely located with respect to each other, all within a wide, tall, deep sound-stage that extends beyond the speakers to fill the listening room.

Smoother Highs

High fidelity reproduction is often marred by the harsh, strident treble overemphasis generated by ordinary cables. MIT's networks create accurate tonal balance across the spectrum, while eliminating the grainy quality that makes treble sound unpleasant. The networks work together to preserve detail, sparkle, and air within the wide boundaries of a large, deep, lifelike soundstage, creating palpable images of soloists. Thanks to MIT's technologies, massed instruments and voices are correctly arrayed in size, dimension and location.

Presence, Detail & Clarity

Superior resolution is the hallmark of MIT Oracle Series interfacing, providing a lifelike image that recreates all of the subtle nuance and detail of the recorded event from triple pianissimo to triple fortissimo, without the image wandering, wavering, blooming or becoming unfocused, even under extreme power demands.

Dimension, Detail & Clarity

2C3D[™] Sonic Hologram and the Oracle V3.1 ultra-wide bandwidth—When used with the finest audio components and with high-quality program sources, The Oracle V3.1 or V2.1 will provide the listener an incredibly lifelike two-channel, three-dimensional soundstage.The 2C3D Hologram's ability to preserve the weight, tonality, spaciousness, and dimensionality of the original performance is unrivaled in the audio world and is made possible only with the use of MIT 2C3D Reference level interfaces.

Beauty, Flexibility and Performance

- Modular design allows for simple, clean and easy installations.
- Full upgradeablity makes performance and configuration changes a snap.
- Advanced network topology removes multiple boxes from the middle of the cable. The Oracle V3.1 rests directly behind the speaker for a clean presentation.
- Total mechanical resonance control limits sympathetic vibrations.
- Limits sympathetic vibrations by tiptoes or "mechanical diodes" built into the bottom of every Oracle enclosure.
- Widest power bandwidth of any interface, delivering in-phase energy throughout the entire audible range of today's amplifier and loud speaker systems.
- Increased clarity and micro-dynamics, accurately preserving the natural texture and space of the recorded event.
- Limited Lifetime warranty

Matching your System

Wide Bandwidth, Ultra-Wide Bandwidth or EX?

Due to the differences in systems (primarily amps & speakers) MIT has designed interfaces to maximize the performance of each system type. The benefits vary depending on the system and configuration.

Wide bandwidth— As is true with most MIT interfaces, the first and most noticeable sonic benefit is their amazing resolving ability. Oracle wide bandwidth interfaces excel in image presence and detail with an unrivaled level of clarity and microdynamics.

Ultra-wide bandwidth— Providing all of the sonic benefits of the wide bandwidth, the ultra-wide interfaces take the imaging to a new level of soundstage dimensionality and realism. Listening room walls disappear revealing an image that truly represents the original recorded environment in all dimensions—width depth & height.

EX option— (available with all wide bandwidth Oracle interfaces) adds additional articulation in the upper frequencies for electronics & speakers that may require these characteristics.

No matter what your system requirements are there is an Oracle that will make it perform at it's best.

See your MIT Dealer for recommendations, or contact MIT direct at 916/625-0129 customerservice@mitcables.com

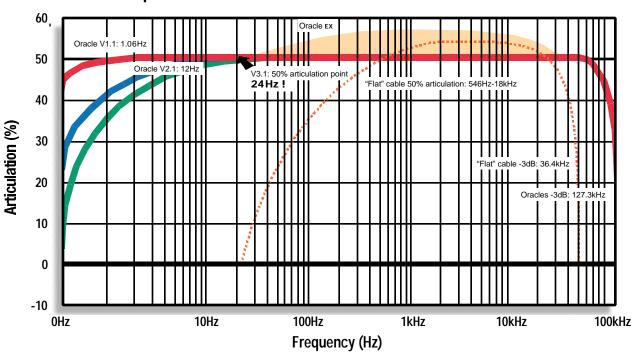


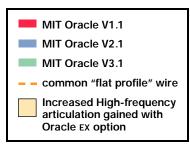
Oracle Performance

The chart below is a representation of the articulation responses of the MIT Oracle Series speaker interfaces and a common "flat" (profile) speaker cable. We use the articulation response measurement to illustrate performance characteristics, because the articulation response best reflects the audible differences in cables*.

If you examine the chart the differences in the articulation responses of the various products become immediately apparent. When compared to the flat-profile, solid-conductor speaker cable the Oracle interfaces are obviously superior in their ability to perform efficiently (at 50% articulation*) over a much wider frequency range. The audible benefits of this ability are not only improved bass response, but also increased clarity and imaging over the entire audible range. The most notable difference between various models of the Oracle interfaces is their ability to articulate effectively at lower and lower frequencies as you step up in the product line.

Articulation Response





The details

This chart was created from actual measurements made at the MIT lab.

The most notable measurement is the initial 50% articulation point for the Oracle V1.1, a remarkable

1.06Hz!

As we move up in the Oracle lineup the V3.1 reaches 50% at 24Hz, the V2.1 at 12Hz and the V1.1 at an incredible 1.06 Hz! This performance is quite remarkable when compared to the "flat" cable which reaches optimum articulation at a disappointing 546Hz, that's just above a "high" C.These measurements should hopefully aid you in quantifying and qualifying the performance of the various MIT Oracle interfaces for your customers. For certain applications, the EX option (available with all wide bandwidth Oracle interfaces) adds additional articulation in the upper frequencies for electronics & speakers that may require these characteristics

*See page 4 for an explanation of the term articulation, the articulation response measurement, and how it is used in the context of this paper.



Oracle Performance (continued from page 2)

What is articulation and what does the articulation measurement mean?

Articulation

Engineering terms such as transfer function, slope of the phase, group delay, time domain frequency domain etc. do not adequately describe what we actually hear. At MIT, we have adopted the term articulation to better describe this phenomenon. The word articulation best describes sound as it is heard naturally or three dimensionally.

Some words that are used when describing articulation in audio systems are: intelligibility; masking; clarity; discrimination; sensitivity; duration; timing; detail; attack and decay; rise and fall time; and loudness. Individually or collectively, these words are used to indicate a system's ability to articulate. When a system articulates properly, one immediately notices speech as being distinct and intelligible. Vowels are clearly articulated, not slurred, and consonants are sharp and distinct. Also, every instrument in the orchestra is heard with pin point location within the complex sound stage.

In the context of this paper, articulation is the ability to retain the highest level of detail and clarity in all amplified speech and sound applications. Along with frequency response and intensity/loudness, all speech and sound must retain proper attack and decay, thereby preserving the natural timing cues required for the listener to accurately locate individual sounds, over distance, within a complex sound field.

At MIT, we have discovered a measurable response that correlates precisely with what we hear —

The Articulation Response

Conventional wisdom views the only meaningful specification regarding interfacing is the frequency response between components; ie. between a pre-amplifier and an amplifier. By default, all audio cables function as a low pass filter, so there is always a high frequency roll-off, hopefully this roll-off is at a frequency much higher than 20kHz. The typical –3dB corner frequency is usually well above 20kHz. This frequency is generally found somewhere between 150kHz and 1.5MHz, well above the audible frequency range.

However, there is a second response that exists well below the -3dB down corner frequency. This is the articulation response of the cable. Measuring the articulation response identifies and explains the problems that we hear. Primarily, these problems will be, a general masking of detail or an overall lack of clarity or intelligibility.

Interpreting the articulation measurement

Ideally, the articulation response of the cable used in any given system should cover the bandwidth, uniformly, over the entire frequency range of the sound being transmitted. In the case of music this is generally considered to be 20Hz – 20kHz. In the case of high quality speech it is

usually 200Hz – 7kHz, and for low quality speech the frequency span is usually considered to be 350Hz – 3.5kHz.

In the graph on the previous page, the vertical (y) axis is scaled as a percentage, and the horizontal (x) axis is frequency. The dark line running from left to right across the graph horizontally represents zero (0%) percent articulation. A cable starts to become articulate at 10%, while 25% is desirable, and 50% articulation represents a perfect cable. The rate at which a cable rises to its full value is also important. Cables that rise very slowly over a wide band of frequencies are not desirable, while cables that rises to at least 10% produces a minimum level articulation. A cable that rises quickly to 25% or higher is very desirable. Generally speaking, a cable that rises and peaks at a frequency equal to 50% of the desired bandwidth (20kHz/2 or 10kHz) will be accepted by both the recording and the audiophile communities. Below 10% articulation, it can be expected that the cable will greatly degrade the performance of the components and the system it is interfacing.

For more information on articulation, power and MIT technologies visit the Technology section of the MIT website:

www.mitcables.com



Music Interface Technologies

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