

# **ACC Series:** Three Articulation Control Console models

### Articulation Console Series: by performance level

Each model in this series of three is named "ACC" for Articulation Control Console, followed by a number to identify the total Poles of Articulation. The higher the number of Poles, the greater the articulation, soundstage and resolution it delivers through the speakers. Each channel is fitted with a unique dashboard with three articulation controls, plus a unique "2C3D" switch.

# ACC Design considerations: working quietly for a lifetime

The stylish CNC milled solid billet aluminum enclosure used for the ACC 268 is the largest MIT has ever produced. This is justified both by the size of the internal parts as well as "proximity sensitivities" that must be considered as the parts are located. Articulation Control Consoles include several new anti-resonance schemes, including internal surface alignments and new methods of isolation.

### Machined enclosures: technology and performance

The internal parts of each ACC interface are primarily

handmade and require about 200 hours of labor to complete. Each component is meticulously matched, piece by piece. Every part is positioned and hand soldered in place. The complexity and number of networks involved require more internal space and insulation from vibration. This is managed by

mounting and isolating the network assemblies on an internal plinth, eliminating sympathetic resonances that can affect playback. The result is imaging of unprecedented clarity and dimension.



2

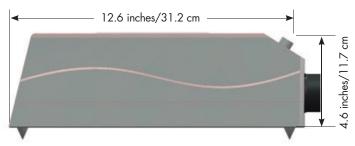




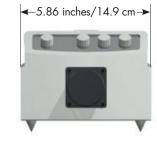
### **ACC 169:** entering the stratosphere of audio

The ACC 169 and 173BW are the first of the three performance levels, suited to any high resolution speaker that is dynamic and well powered. The unique enclosure is designed to allow the large *Music Hose®* to couple with the face, or dashboard end of the enclosure, while the output tails exit the opposite end nearest the binding posts of the speaker. This allows easy access to the ACC controls for swift and accurate setup. There are 169 Poles of Articulation inside at work preserving a delicate and complex musical signal. At the same time it is storing and delivering reserve power to the driver complement, whenever additional energy is required by the audio signal. When either the ACC 169 or 173BW interfaces are installed in a top-tier system, a musical presentation will seem faster and begin to "pop" and "hang in space", while remaining articulate and "easy" or "open sounding" in detail.





Weight: 10.7 lbs./4.85 Kg



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### **ACC 206:** better isolation, improved performance

The ACC 206 and 210BW are a blend of the smaller size of the ACC 169 plus the stylish and vibration isolating features of the ACC 268. To increase performance MIT adds more Poles of Articulation, which demands a slightly larger enclosure. As with all ACC Series interfaces, the ACC 206 is designed to sit next to, or behind, a mid to large sized speaker enclosure. ACC 206 and 210BW technology provide increased saturation of image that will appear

"seamless" to the listener. You'll experience textures and timbre that are realistic, believable and hugely dimensional from left to right, front to back and top to bottom. The unique 2C3D capabilities of this design are astonishingly realistic, and at the same time invisible in terms of speakers and speaker placement. The "speakers disappear" is a description commonly used by knowledgeable audiophiles when they first experience the ACC 206 and 210BW.





Weight: 17.4 lbs./7.9 Kg





# ACC 268: the pinnacle of audio interface technology and design

The ACC 268 and 272BW are the "cost no object" and "no detail not considered" culmination of Bruce Brisson's lifetime of audio interface design and engineering experience. The ACC 268 and 272BW are his "manifesto" to others who seek the highest level of audio playback with the goal of transporting the live event experience into your listening room. We invite you to share this formerly unattainable visceral music experience by auditioning the ACC 268 and 272BW interfaces.



Weight: 45 lbs./20.4 Kg



# Mathematical Sector (Sector Content of Sector Secto





The philosopher Pythagoras is credited with discovering that musical harmony, or consonance comes when the ratio of musical frequencies consist of simple numbers. The story tells of the philosopher talking as he passed a blacksmith shop. While hearing the familiar sounds of ringing hammers he discovered that it was the weights of the hammers themselves that were responsible for the relative tones he heard. He was able to determine that a hammer weighing half as much as another sounded twice as high. This is an octave (2:1). A pair with a weight ratio of 3:2 (a fifth apart) sounded beautiful as well. He discovered that simple ratios made the most pleasing (consonant) sounds.

The more simple the ratio between the harmonic and the fundamental, the more consonant the harmonic will be.

#### Music intervals and cents-

A cent is a unit of measure used for musical intervals. In the western scale, an octave contains 1200 cents. Because each octave has twelve notes, the interval or space between each note is 100 cents\*. Cents are often used to measure extremely fine intervals. It is commonly accepted that a person can detect a five to six cent interval. For example, if middle C on a piano lost its tuning to a degree of six cents, the human ear will detect that the kev is out of tune, whether it is sharp (up) or flat (down). Most audiophiles are able to discern a two cent interval or less. This may be due to practice, hours spent listening to music, or it may be simply related to an individual's "innate ability". This accounts for the ability of one person to detect the tiniest nuance in music while another person may not. Because of the audiophile's acute ability to discern these minute differences between tones, extreme care must be given in the design and construction of an audio interface to ensure that the consonant intervals and all harmonics being optimized are done so within an exacting tolerance. This technology is only provided by MIT.



11

### Fractional Articulation Technology™: the next logical phase in music interfacing science

Prior to 2007, the thrust of MIT Cables' engineering focused on optimizing a cable's ability to transport an audio signal octave-to-octave. In 2007, MIT

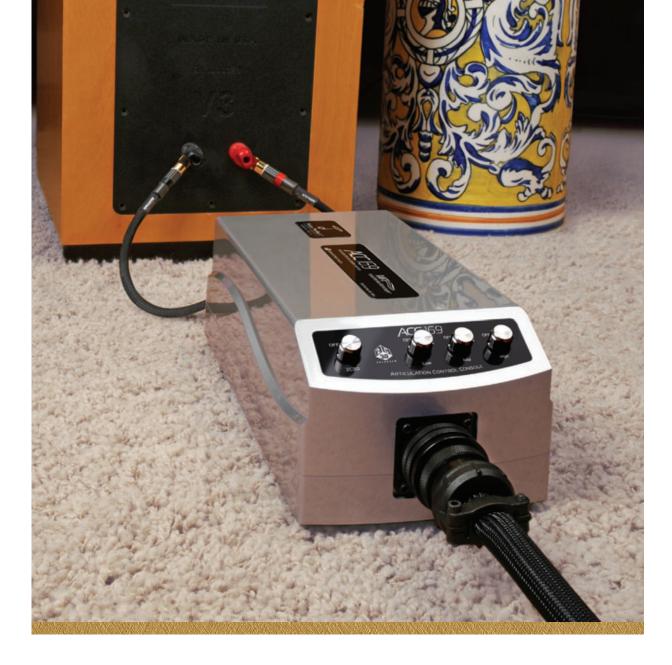


introduced Maximum Articulation technology which built upon previous Oracle designs

to include the optimization of harmonics *outside* the octave. In 2010, this technology was expanded to allow the user to fine tune system articulation, helping to further maintain harmonics within the signal, preserving pitch and ensuring the consonance or integrity of the musical experience. Fractional Articulation Technology (F.A.T.) was born of a test and measurement technique called Fractional Octave Analysis, going another step in optimizing and maintaining the harmonic structure of the audio signal. Instead of concentrating on harmonics outside the octave, harmonic optimization within the octave is achieved, improving the natural textures and density of the music. In essence, by combining both Maximum Articulation and Fractional Articulation technologies, more of the audio signal is properly transported through the interface.

12 Music Interface Technologies





14 Music Interface Technologies

### **New Technologies:** for the most advanced audio interfaces on the market today

JFA II—Jitter Free Analog II is an update designed to control a commonly misunderstood effect occurring in most audio systems. This effect is the result



of an electrical event that causes the fundamental, or its harmonics, to quickly iitter

or "shuttle" slightly within the sonic envelope. It's perceived by the mind's eye as a blur, or halo effect emanating from the sonic image. This phenomenon is damaging to articulation, timbre and the complex textures of music. With JFA II, low level detail is enhanced and spatial cues are believable.

With the exquisite capabilities of the newest generation of dynamic transducers and newly emerging tweeter technologies, the positive effect of JFA II is particularly relevant. Above all, JFAII preserves an accurate, stable music signal. This technology benefits the system not only in the tonal realm, but also by allowing the system to create a stable image within and beyond the edges of the speakers and room. SIT-Stable Image Technology: When the (now) stabilized signal is delivered to the load (speaker), a solid image is created and the tonal balance



is accurate. This image must also be maintained in size and in location across the dynamic

range—from the smallest whisper to the loudest roar. To maintain tonal balance, image specificity and size, the cable must be linear in voltage and current over the entire audio frequency range, from input to output. To achieve this, MIT Input Terminator and Output Terminator circuits are included to work together in the power domain. This works to hold the image stable regardless of dynamics. In sum, the Energy Component is both stored and transported linearly, following transient power demand, and keeping the music signal's frequency and time information intact.





16 -➢ Music Interface Technologies

### ACC Series "Dashboard": fine control over system articulation

A thousand man hours in development, each ACC interface includes a unique "dashboard" (to present the control knobs), requiring more than 100 additional circuits compared to prior MIT interfaces.

Discreet articulation control is now possible over three sections of the bandwidth, allowing the listener to adjust for challenging room conditions, equipment changes and (sometimes) software choices.

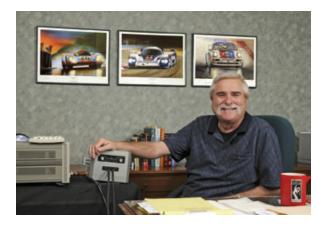
To the left of the three Articulation control knobs is a fourth switch. With this control, the listener can

choose to activate or disable the 2C3D circuitry with a simple "on-off" selector. Enabling the 2C3D switch allows more power to be delivered to the Multipole circuitry to produce or "throw" more energy into the room, furthering the "suspension of disbelief". That is, the listener is more likely to believe that a live performance is within the same air space. This effect occurs when the additional energy couples with the physical body of the listener. We call this a "visceral" response to an audio event!





# MIT: a legacy of innovation



MIT Cables founder Bruce Brisson began purposefully designing audio cables in the 1970's after encountering the sonic problems inherent in cables typical of the day. He later founded Music Interface Technologies in 1984 after patenting and licensing his early designs to other manufacturers, producing some of the audio industry's most ground-breaking and seminal products.

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18



The Interlink® Reference: the interface that started the high-end cable industry. Designed by Bruce Brisson for Monster® Cable in the early 1980s.

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268





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20 🎤