



THE ART OF SOUND

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[www.tad-europe.com](http://www.tad-europe.com)



## REFERENCE ONE MK2 SPEAKER SYSTEM PROVIDING MUSIC IN ITS PUREST FORM.

Since its inception, the TAD Reference One has quickly become the established reference point for speaker systems in the new era of high definition audio. This ultra high end speaker system is based on highly advanced technology developed by TAD, creators of studio monitors favored by leading sound studios around the world. It employs carefully selected materials and parts, and benefits from scrupulous, even relentless, attention to detail, backed by our design theory and testing ability. The result is a sound field of flawless purity that achieves unprecedented professional audio artistry. The TAD Reference One realizes richly resonant sound of which has never been heard before.

### **CST TECHNOLOGY**

The CST (Coherent Source Transducer) has enabled us to achieve our goal for the TAD Reference One: reproduction with controlled directivity over a wide range, from a single point with uniform phase. The design of the midrange cone is based on detailed calculations, so not only does it have superior acoustic characteristics, but it also controls the directivity performance of the tweeter due to the concentric configuration. This unifies the acoustic center of the tweeter and midrange, and reconciles the phase and directional characteristics through the crossover range. The CST Driver is thus a large step forward for coaxial speakers, enabling ultra wide range reproduction of 250Hz to 100kHz, accompanied by a directivity pattern, which neatly dampens without disruption across all bands. The result is extremely clear and stable imaging, a wide frequency response, and incredibly rich and natural sounding reproduction.





# TAD

## UNCOMPROMISING ATTENTION TO DETAIL

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Our engineers have accumulated years of experience in designing high-end audio products that have won critical acclaim.

Their meticulous design work for TAD products begins by carefully selecting every part and component that goes into them and continues until the engineers have exhausted all their technical expertise and efforts. On the production line, certified artisans hand-assemble every TAD product with uncompromising attention to detail.

TAD professional speakers have been used in a variety of demanding commercial applications, such as studio monitors and SR speakers, and the state-of-the-art TAD Cinema Speaker System has been installed in famed concert halls, movie theaters, and performing theaters. Since debuting in 1978, the uncompromising performance characteristics and reliability of TAD speakers have earned the trust of professional engineers and audio producers around the world.

### ***BERYLLIUM - UNIQUE VAPOR DEPOSITION TECHNIQUE***

The tweeter dome and midrange cone are made of beryllium, the lightest and most rigid of metals, which makes it a superior diaphragm material, and one which boasts a history of more than 30 years of TAD achievements. The diaphragm is produced using a vapor deposition technique developed by TAD and refined over many years. It provides strength and uniformity, combined with high internal loss, for smooth superior performance. The tweeter diaphragm shape is derived by using an advanced optimization method based on HSDOM (Harmonized Synthetic Diaphragm Optimum Method) computer analysis. It accurately controls differential vibration produced by the diaphragm and moves it out of the audible band, providing a response as high as 100kHz. The large midrange cone features a direct radiation, vapor deposition beryllium diaphragm. The resulting sound is astonishingly transparent, direct and precise across a wide frequency range.

### ***ISO DRIVE TECHNOLOGY***

The CST Driver is mounted into a high-stiffness enclosure that is precisely shaped to minimize the diffraction of the radiated sound. In order to maximize the capability of the CST driver, we developed new ISO (isolation) technology. This involves including a mechanism to block vibration from the driver unit entering the enclosure, thus structurally separating the CST Driver from the enclosure. The CST Driver, with its powerful drive capability, is prevented from exciting the enclosure and reducing the radiation of secondary sound. It also limits the influence of the energy from the powerful bass drivers. Delivering only sound radiated from the CST Driver diaphragm improves resolution to convey accurate detail, allowing, for example, the differences in tone color that vary subtly according to how the performers play or sing, to be heard with unmatched clarity.



TAD is a company that never compromises its design concepts and technologies. Our mission is to achieve a purity of sound to a degree that has never before been experienced. Backed by 30 years of professional audio experience, this reference standard disc player inherits the TAD spirit of continuous evolution and refinement. Its core technology, an Ultra-High-Precision Crystal Generator master clock (Master Clock UPCG) provides an ultra-high clock to noise ratio achieving incomparably accurate digital-to-analog conversion performance. With this innovative technology, the D600 begins a new era in music reproduction: music unaltered from the original recording and true to the performance.

## D600 DISC PLAYER

**PURE SOUND THAT KNOWS NO COMPROMISE.**

### PURITY



The D600 employs a new proprietary crystal oscillator that improves noise level more than 50dB compared with conventional players, attaining ultra-high C/N characteristics. TAD focused specifically on C/N in order to provide the most accurate sound reproduction capability, aiming to thoroughly reduce jitter in the low frequency sideband ranges relative to the center frequencies. TAD developed the crystal oscillator in co-operation with a crystal manufacturer. Based on technologies developed for high-speed digital base station relay facilities, this produces an oscillator perfect for the D600.

### NEW OUTPUT CIRCUIT

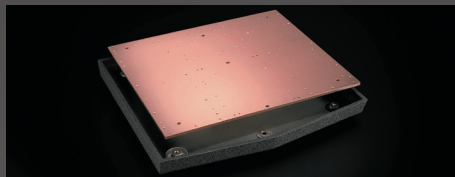


The performance of the I/V conversion circuit, which transforms the current output from the D/A converter to voltage, significantly impacts sound quality. The discrete I/V conversion circuit used in the D600 was developed to significantly lower noise and achieve a high slew rate. Together this results in a superior sound-stage presentation, improved rhythmic integrity and enhanced transient attack of the musical signal.

### TWIN BURR-BROWN PERFORMANCE PCM1794 DAC'S

Two Burr-Brown PCM1794s, a well respected high performance DAC, are connected in parallel in a balanced configuration. This improves audio performance in all metrics including S/N ratio, linearity, dynamic range and distortion. The result is that even delicate audio sound nuances are reproduced faithfully, creating a greater degree of realism in the music.

### CHASSIS

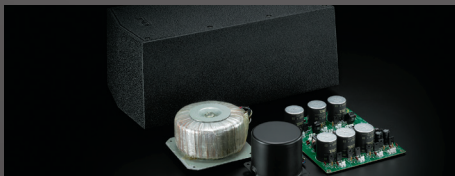


An important factor in the quest to improve sound quality is the ability to control noise-causing vibration. To this end, the D600 has a die-cast aluminum chassis with high-vibration absorption performance. Inside, a heavy 6mm thick copper-plated galvanized steel plate further dampens vibration and lowers the center of gravity. This two-layer structure ensures high stiffness and low vibration to greatly reduce any impact on sound quality. Additionally, the copper plating contributes to lowering the ground impedance, improving the S/N ratio.

### SEPERATE POWER SUPPLY UNIT

The player unit and power supply unit are completely separated. This eliminates the harmful affects of extraneous vibration on the mechanisms and audio circuits, as well as magnetic flux leakage from the power supply, significantly improving sound quality. In addition, the double-housing permits the transformers and rectification circuit to be designed without compromise, something not possible in a single housing.

### SUPER-POWERFUL 400VA TRANSFORMER



To obtain a highly stable power supply, a powerful transformer is necessary. After a comprehensive series of listening tests at various power supply capacities, a 400VA toroidal transformer was selected. Delivering on a par with transformers used in high-power amps, it achieves an incredibly high performance level for a disc player.

### HIGH-STIFFNESS CD/SACD MECHANISM



Realizing the ultimate in reproduction accuracy also required an innovative design for the CD/SACD mechanism. It features high stiffness, smooth operation and superior vibration control properties thanks to a precise loading mechanism equipped with metal shaft bearings. The pickup employs an infinite conjugate optics system, ensuring both stable operation and high reading precision. The highly-rigid disc tray is formed from precision-machined aluminum to further minimize vibration. A black sheet on the tray both restricts the scattered reflection of laser light to increase reading precision and contributes to vibration control.

### HIGH PRECISION DAC MODE

The D600 can also be used as a high performance D/A converter. Its combination of Ultra-high C/N Master Clock UPCG and sampling rate converter achieves extremely accurate D/A conversion of digital signals input from external sources. The conversion of digital data streams output from a computer is also possible. You can enjoy high quality music sources with sampling frequencies up to 192kHz/24-bit.



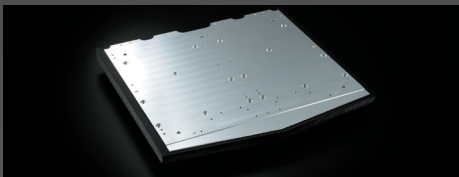


The C600's quality results from a fundamental reassessment of all aspects of electrical and mechanical design. It creates reference quality that etches a new name in the history of TAD. From the meticulous left & right symmetrical design, dual mono construction and fully balanced circuitry, it reaches a new peak of performance. Faithful in every respect to our TAD philosophy of the closest approach to the original artistic intent, the C600 reference series preamplifier possesses unprecedented reproduction capability. The rich world concealed in each and every musical performance is conveyed with unrivalled accuracy and fidelity, true to the original musical performance.

## C600 PREAMPLIFIER

### UNPARALLELED TRANSPARENCY AND MUSIC FIDELITY.

#### MACHINED CHASSIS



33mm thick and weighing 15kg, the sub-chassis is fabricated by precision processing of pure aluminum ingots, achieving a high level of vibration control that drastically minimizes the impact of vibration from speakers or other sources, as well providing a stable mechanical ground. All the additional chassis parts are machined to the same high accuracy as the sub-chassis, serving to reduce the impact of vibration and external noise while contributing to the reproduction of music with ultra high purity and faithfulness to the input signal. The spike-shaped three-point support feet ensure mechanical stability on any support surface. These comprehensive measures combine to free the C600 from undue external influences and allow it to achieve its full potential.

#### DUAL ENCLOSURE



In order to eliminate any influence from the power supply to the amplification circuit and signal routing, the C600 uses a dual enclosure configuration that separates the amplifier from the power supply. This minimizes the effects of noise caused by vibration or magnetic flux leakage from the power supply transformer. A power amplifier-grade 400VA rated toroidal transformer provides a degree of precision that allows accurate signal transmission, even during large signal levels and fast signal fluctuations. Together with a fully balanced circuit design that eliminates unnecessary noise currents, the result is the ultimate in low noise performance.

#### SENSITIVITY ADJUSTMENT

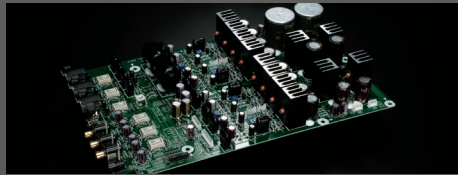
The C600 allows input sensitivity to be set independently for each input terminal, so the general sound level does not vary when you switch between different sources.

#### HIGH PRECISION



TAD's new ladder-resistance switching electronic volume control circuit achieves an absolute channel level difference of 0.1dB or less, even at attenuations of more than 100dB. The distortion produced by the circuit is only 0.0005% (@1Vrms input). The impedance seen at the input and output terminals is independent of volume setting, minimizing interaction with the signal circuitry and maximizing fidelity of the sound. The use of fully independent left and right electronic volume control circuits ensures accurate auditory lateralization and sound field reconstruction. The input selector switch and volume control shaft bearing incorporate a precision ball bearing with a diameter of 41mm. These features provide the highly precise operating feel that you expect from TAD.

#### SIMPLIFICATION



Based on the TAD concept that "a signal route exemplified by the absolute minimum of functions results in the most accurate and high quality sound," the C600 has an extremely simple circuit configuration. Following input signal volume adjustment by the electronic volume control, the circuit configuration utilizes only one voltage amplification stage. Equipping each of the two line outputs with their own dedicated amplifier circuits eliminates the output circuit signal branching as well as interference from connected equipment that can cause sound quality deterioration. In order to transmit music signals as simply and accurately as possible, the monitor switch has been eliminated due to its potential effect on sound quality. Furthermore, the audio pass-through function sets the gain to unity, without introducing additional switching circuitry, to maintain maximum signal purity.





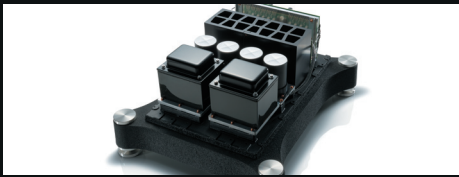


TAD's philosophy has remained unchanged for over 30 years: deliver sound that conveys the full range of emotions without alteration. This philosophy has driven us to develop technology for reproducing music in its purest form. Over the past three decades our technology has advanced the ultimate limits of quality sound reproduction, to achieve the finest in performance. The result is the 600 Watt / 4 ohm total balance M600 monoaural power amplifier, transforming the ideal into reality and offering the guaranteed quality and uncompromised design that only TAD can provide.

## M600 MONOAUURAL POWER AMPLIFIER

### PROVIDING MUSIC IN ITS PUREST FORM.

#### SYMMETRICAL DESIGN



The basic concept of the M600 is the realization of total symmetry and the fusion of technologies into one perfect form to achieve the ultimate in sound reproduction. The BTL (Bridged transformer-less) design is created with total symmetry. Every aspect has been examined and optimized: the twin power transformers, the parallel positioned electrolytic capacitors and the layout of the components on the circuit board. All are designed to be symmetric with regard to influences such as temperature change, magnetic fields and vibration.

#### CAST-IRON MONOCOQUE CONSTRUCTION



The M600 employs a 35kg graphite cast-iron monocoque construction to reduce the effects of vibration to the absolute minimum. Compared to regular cast-iron, inner loss is increased making it extremely effective at vibration damping and resonance control. The 18mm (0.7 in.) thick aluminum front panel, the low center of gravity brought about by the adjustable spikes extending downwards from the wide-stance chassis and the aluminum plating in the spaces between the chassis and the components (such as the power transformers and capacitors) all act together to minimize the influence of any vibration. The independent chimney-style heat sink completes this total defense against vibration.

#### C2I GROUND TECHNOLOGY

The greatest benefit of balanced circuitry is that virtually no electric current flows through the ground. The self-contained heat sink shields the circuitry from the large signals that powers the speakers, thus preventing any potential difference. The balanced amplifier's ground potential is therefore completely isolated.

#### SIMPLE CIRCUITRY



For an amplifier to transmit the input signal with complete accuracy to the speakers, the circuit should be as simple as possible. To this end, the M600 is designed to achieve its voltage amplification in just one stage. Combined with current feedback, the amplification stage achieves extremely stable performance. This makes it possible to simplify the phase compensation circuit and eliminate the output choke. Additionally, situating the circuit board directly in front of the rear panel allows the shortest possible signal path from input to output. With the large heat-sink separating the circuit board from the power circuitry, interference from magnetic and electric fields is minimized.

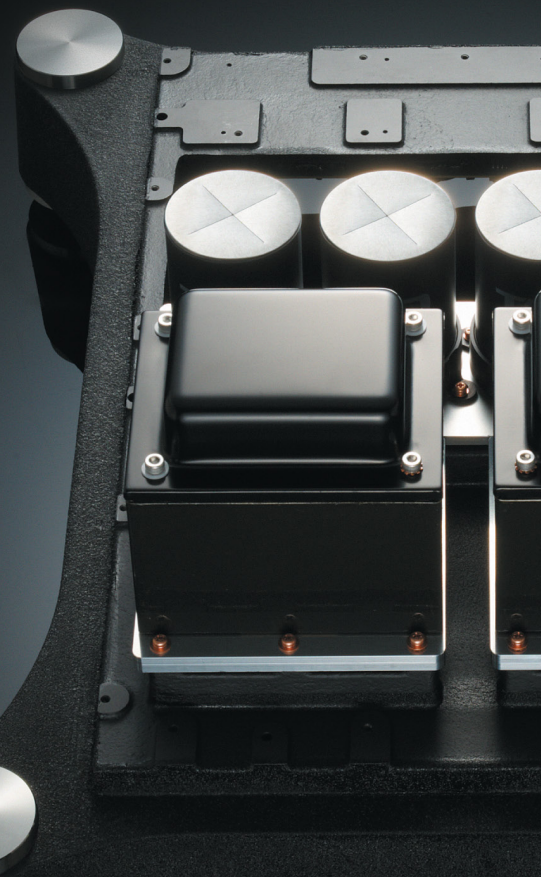
#### CUSTOM-DESIGNED PARTS



In order to bring the ideal into reality in design and construction the M600 relies on parts of only the highest quality. PPE (Polyphenyl Ether), commonly used in communication satellites, is combined with 135um thick oxygen-free copper foil to create our unique circuit boards. Permittivity is reduced, the capacitance of the pattern is as small as possible and signal transmission losses up to the very high frequencies are minimized. The core of the 10kg (22 lb) transformer is wound with insulating sheets and 2.6mm diameter heavy copper wire to form our exclusive independent winding power transformer. With a power supply using four custom built 33,000uF capacitors, every circuit detail has been studied and optimized to ensure the highest quality.

#### HAND ASSEMBLED

In order to ensure the absolute maximum product quality the M600 is the beneficiary of total precision at every point in its construction process. The utmost care is exercised in maintaining the quality of every part. One example is the extremely high level of technology that is utilized for the cutting of the ventilation ducts in the aluminum top panel. To achieve the absolute quality demanded by TAD products, all components are developed in a custom workshop and hand assembled by veteran engineers worthy of being called audio craftsmen. This meticulous assembly process uses torque-regulated screws to prevent any distortion in the casing, resulting in a product that truly can be considered a masterpiece.





# INSPIRING THE JOY OF LISTENING

TAD has many goals, but one above all: to reproduce music with the realism of recorded performance. By reproducing the genuine sound, we remain faithful to the intentions and passions of the artists who create the music. How do we achieve reproduction of the genuine sound? Through an uncompromising pursuit of maximum sound quality, and by taking full advantage of unique concepts and our wide range of advanced technology.

## PHILOSOPHY

Technical Audio Devices Laboratories, Inc. (TADL), grew from the spirit to discover technologies to perfectly recreate the pure sound of live performances with uncompromising craftsmanship. We inherited our philosophy from Bart Locanthe, recognized across the globe as the ultimate sound technologist. He believed that genuine technology is true to the basics and that genuine technology places greater importance on sound quality than on technology for its own sake. At TADL, we are honing our technology to create equipment that reproduces musical sounds and evokes both the energy and impact of live music.

## MISSION

- ▶ We are working to optimize the pleasure and pride of ownership with the wonder and thrill of listening.
- ▶ We are devoted to our high-level technologies and carefully craft each product by hand, even as the times, technology and audio environments advance.
  - ▶ We are innovating to effectively incorporate the latest materials and technologies in our basic design policies and concepts.
  - ▶ We are maintaining design quality to ensure long-term use, fusing Japan's unique materials and technologies to improve artistic qualities.
  - ▶ We are actively promoting socially responsible activities for environmental conservation to balance consumption and production.





# CE1 COMPACT EVOLUTION ONE | SPEAKER SYSTEM

## OVERWHELMINGLY MASSIVE SOUND FROM A COMPACT CABINET.



\* CE1 mounted on optional speaker stand ST2



\* CE1 mounted on optional speaker stand ST2

### NATURAL SOUND CST DRIVER



The midrange and tweeter are configured concentrically to match their directional characteristics and eliminate disruption of the sound, while the tweeter diaphragm is elaborately designed and built from lightweight, high rigidity beryllium. With excellent stability, it delivers outstanding sound localization and a natural sound field over a truly wide bandwidth from 250Hz to 100kHz.

### 18CM WOOFER WITH A MACS<sup>®</sup> DIAPHRAGM



The shell-shaped diaphragm integrates the center cap and cone into a single piece. Coupled to the voice coil via a molded cradle that fully conveys the powerful driving force of the large neodymium magnet, and combined with the turbulence suppressing aerodynamic design of the rear side, this woofer delivers a rich, clear bass and vibrant lower midrange.

\* MACS: Multi-Layered Aramid Composite Shell

### SILENT<sup>®</sup>

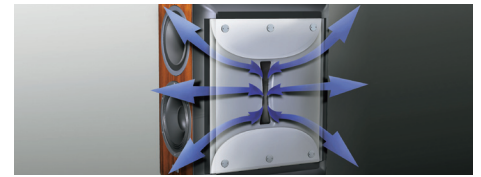


The cornerstones of its outstanding physical properties are its combination of birch plywood braces, MDF panels and Bi-Directional ADS Port featuring 10mm-thick hard anodized aluminum side panels that provide

superior strength and vibration dampening. Additionally, optimization of the enclosure size and port layout have eliminated standing waves up to 250Hz.

\* SILENT: Structurally Inert Laminated Enclosure Technology

### BI-DIRECTIONAL ADS<sup>®</sup> PORT



Slit-shaped ports are positioned on both of the enclosure's side panels with flared openings to the front and rear. The symmetrical front-back, left-right layout eliminates the effects of unwanted sound from the port as well as standing waves within the enclosure. Considering the compact size, you'll be amazed at the rich and powerful sound field that will fill your listening room.

\* Bi-Directional ADS: Bi-Directional Aero-Dynamic Slot

### MINIMAL BAFFLE



It takes full advantage of the characteristics of the CST Driver and Bi-Directional ADS Port in the absolute smallest layout area. The result is smooth, broad sound diffusion that keeps diffraction to a minimum. With a high quality mirror finish on tropical olive grain wood, paired with hard anodized aluminum side panels, it exudes a uniquely individual presence: luxurious, while still unprecedentedly cutting-edge.



## C2000

PREAMPLIFIER & D/A-CONVERTER

*AN EXCITING NEW FRONTIER IN EVOKING THE ESSENCE OF SOUND.*



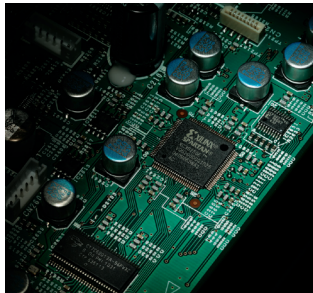
### PURITY

This model embodies the philosophy and technical standards behind TAD's dedication to conveying all the passion contained within music. Testifying to this is the latest development derived from our top-end, highly praised D600 disc player: the Ultra-High C/N<sup>1</sup> Master Clock UPCG<sup>2</sup>. To ensure precise reproduction with no tonal changes, TAD focused on minimizing low frequency distortion caused by noise from the clock itself occupying the same spectral region. Designed to achieve a pure low-noise signal approaching the upper limits of audibility, our highly innovative master clock is featured in this model.



### INNOVATION

In order to achieve the best sound quality from music, files transferred from a PC, TAD developed the Asynchronous USB Transfer Engine. In contrast to the normal synchronous transfer method, the asynchronous method adopted by the C2000, controls the data transfer on the receiving end using a high quality clock, and resulting in a high-precision PCM signal free from clock jitter created in the PC or transfer stages. The ultra-high C/N master clock UPCG equipped D/A converter converts it to precise, high-quality music signals.



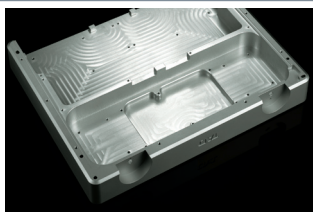
### ACCURACY

In order to achieve accurate signal transmission, the C2000 maintains a fully symmetrical design, right down to the circuit topology, the PC board and the wiring. The analog circuitry is fully balanced from input to output. These circuits utilize separate boards for left and right channels with identical wiring lengths for each, achieving identical L/R circuit symmetry with Dual Mono Construction.



### STABILITY

In order to prevent vibration from affecting sound quality, the chassis is machined from a solid piece of aluminum to eliminate joints and provide a stable, heavy and mechanically grounded platform. The components are directly attached to further limit any chance of noise-generating vibration. Even the feet, made of cast iron, are supported at three points to the chassis for improved stability.



### ELEGANCE

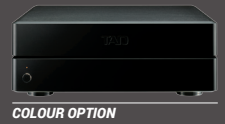
The D/A converter uses Burr-Brown PCM1794A chips in a twin differential configuration. The circuitry and power supplies are completely isolated between digital and analog sections, ensuring low noise. A 70µ copper foil PCB lowers losses from board wiring, permitting accurate signal amplification. The power supply utilizes a high capacity toroidal transformer for a powerful, yet responsive sound.



## M2500MK2

POWER AMPLIFIER

*BREATHING NEW LIFE INTO MUSIC.*

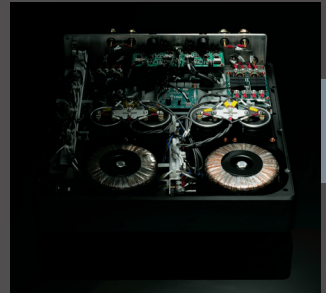


COLOUR OPTION



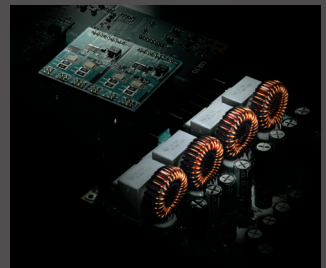
### BALANCE

In order to provide precise speaker drive to the utmost limits, TAD strives for symmetry in both circuitry and structure, with the goal of achieving perfect balance. By completely separating left and right channels from input to output, along with power supplies and transformers that are separated between both left and right channels and positive and negative rails, complete symmetry is maintained. Utilizing a bridged transformerless design with two amps in a balanced configuration, the TAD-M2500MK2 delivers high output power of 500W/2ch respectively.



### SPEED

To provide an overwhelming feeling of speed and energy, the analog power supply is equipped with a high capacity toroidal power transformer and electrolytic capacitors. Combined with a Class D output stage, the result is high purity amplification with superior high speed response. For optimum sound, TAD adopted very low on-resistance power MOSFETs with no lead wires. Maintaining low heat generation, thanks to the high efficiency of Class D, the TAD-M2500MK2 achieves high power without traditional heat sinks.



### STABILITY

In order to control vibration that affects the sound, the chassis is machined from a 90kg block of aluminum, effectively eliminating all joints other than connections. This helps stabilize the ground potential and further improving sound purity. It also provides both high stiffness and high internal loss, achieving improved sound quality. A three-point cast-iron insulator dampens any vibration transmitted through from the feet.



### EFFICIENCY

The sound quality of a Class D output stage is greatly influenced by the power source. The M2500MK2 is equipped with a large toroidal power transformer that utilizes high quality grain-oriented steel for superior magnetic saturation characteristics. Low energy conversion loss, due to the strong coupling between the primary and secondary winding of the toroidal power transformer, low load fluctuation properties based on parallel winding, along with our proprietary 33,000µF electrolytic capacitors, results in an analog power supply with high drive capacity.



### ELEGANCE

The precisely machined chassis is formed from a solid block of aluminum. The twin tones of silver and black for the divided upper and lower halves produce a striking appearance. The M2500MK2 is also available in a dramatic all black finish. The elegant and clean design, extending to every detail, such as the elimination of visible front panel screws, ensures that either color choice will harmonize beautifully with any room.





# E1TX EVOLUTION ONE | SPEAKER SYSTEM

THE ART OF SOUND.



## SOUND WITH ALL ITS ORIGINAL BRILLIANCE

The E1TX adopts TAD's micro CST Driver, designed exclusively to deliver a truly natural sound. This 9cm micro driver was originally implemented in the critically acclaimed TAD Micro Evolution One series. As with all TAD CST drivers, the precision-designed midrange and tweeter are positioned coaxially for optimal directional characteristics with minimal audio interference, each complementing the other's respective output and successfully achieving the point sound source concept. Lightweight yet highly rigid beryllium is utilized for the tweeter diaphragm, contributing to the CST driver's ability to deliver superb and stable localization of sound with natural sound field reproduction over its broad frequency band from 420Hz to 60kHz.



## CAPTIVATING MIDRANGE AND PRECISE BASS EXTENSION

Twin 16cm woofers feature TAD's proven MACC<sup>®</sup> Diaphragm combined with a powerful magnetic circuit to achieve outstanding drive linearity for superior midrange response and excellent bass extension. The unique construction of the MACC Diaphragm is composed of layers of aramid fabric and raw fibers formed individually, then laminated to form a single composite cone. The result is a diaphragm with enhanced strength, improved internal loss characteristics and ideal vibrational behavior that produces rich, smooth midrange and deep bass free from coloration and distortion.

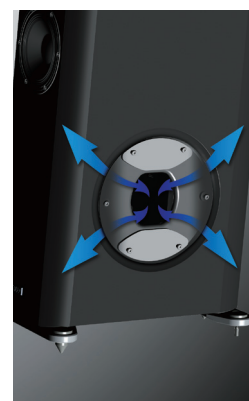
\*MACC: Multi-Layered Aramid Composite Cone



## BASS FOUNDATION DEVELOPED THROUGH ADVANCED ENGINEERING AND ART

First introduced in TAD's Compact Evolution One, the Bi-Directional ADS<sup>®</sup> Port is an innovative approach to achieving powerful bass reproduction. Applied for the first time in a floor standing, full-range design, the unique Slit-shaped ports of the E1TX are positioned low and near the floor for the standing wave leakage reduction and the natural bass reproduction, and exist both the left and right sides with circular shaped flared openings to the front and rear of the enclosure. This symmetrical front-back, left-right layout combined with the low, offset slot location eliminates unwanted sound from the port and reduces standing waves within the enclosure. Combined with the organic, compound shape of the beautifully finished cabinet, the E1TX is an acoustic and visual work of art, capable of reproducing a rich and powerful sound field that will fill your room and your senses.

\*Bi-Directional ADS: Bi-Directional Aero-Dynamic Slot





## D1000MK2

DISC PLAYER, D/A-CONVERTER, PREAMPLIFIER

**BRING THE TRUE BEAUTY OF MUSIC TO LIFE.**



**COLOUR OPTION**

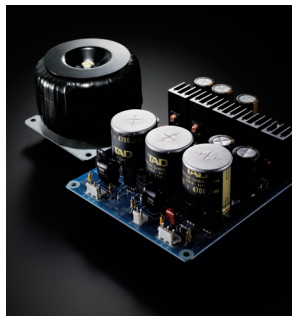
### PRECISION

To convey all the emotion and passion of the original source, reproduction must be precise and pure. A natural consequence of TAD's relentless pursuit of this audio philosophy, the Ultra-High C/N Master Clock UPCG is combined with high-quality, parallel connected, dual differential independent D/A converter ICs for both the left and right channels. To reduce residual noise, even at high sample-rates, a discrete I/V conversion circuit is utilized. D/A conversion with virtually flawless accuracy is now a reality.



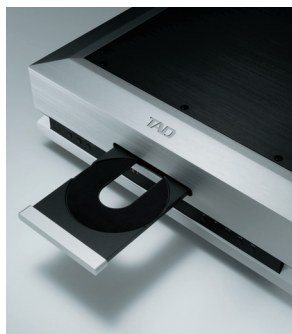
### AUTHENTICITY

All internal parts and circuits are designed and constructed with care and precision. From the careful alignment between the theory and practice behind our selection, and use of component parts subjected to an uncompromising reiterative testing and auditioning process, this is the very essence and DNA of all TAD audio equipment. For example, utilizing high output toroidal power transformers in dedicated independent power supplies for analog and digital circuits eliminates potential mutual interference, and easily handles the power and speed demands of high resolution sound reproduction.



### HERITAGE

Based on the concepts, designs and techniques behind TAD disc players in a stylish new form, the D1000MK2 is our next generation SACD/CD player. With a machined aluminum disc tray and low-noise brushless DC servo motor firmly mounted in an 8mm-thick aluminum chassis, TAD has succeeded to eliminate external vibration from our high definition mechanisms, guaranteeing stable high quality playback. This is possible through a newly developed insulator utilizing a spike structure to enhance isolation. Additionally, with a range of inputs complete with USB and digital, you can also enjoy it as a high-performance DAC.



### PROGRESS

We've also included one of our latest developments, the Asynchronous USB Communication Engine. Playback via USB input is capable of handling PCM audio data up to 384kHz/ 32 bits, and DSD audio data up to 5.6MHz.



## M1000

POWER AMPLIFIER

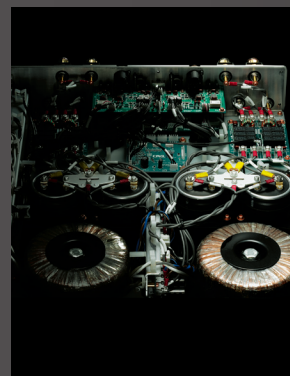
**THE ESSENCE OF MUSIC IS WOVEN RHYTHMICALLY INTO EACH NOTE.**



**COLOUR OPTION**

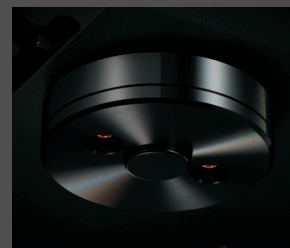
### PERFECT BALANCE BY THE PURSUIT OF PRECISION

TAD strives for symmetry in both circuitry and structure, with the goal of achieving perfect balance to precisely drive speaker systems to their utmost limits. By completely isolating the left and right channels from input to output, completely balanced symmetry is maintained. All aspects of the M1000 follow a dual mono design structure with the power transformer, rectifier circuits, smoothing circuits and stabilizing circuits completely independent for the left and right channels. Additionally, symmetry is maintained within each channel by using separate positive and negative voltage rails. Utilizing a BTL (bridged transformer-less) design, with two output stages connected in a balanced configuration for each channel, the M1000 delivers 500W per channel.



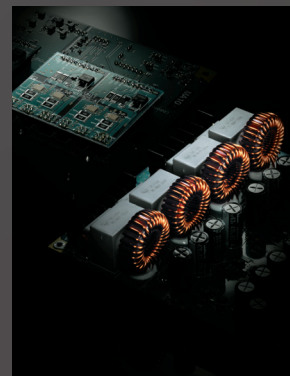
### VIBRATION CONTROL THROUGH MATERIAL SCIENCE

Thorough vibration control is vital as even micro vibrations can produce signal variations and ultimately affect sound quality. By utilizing a three-point support structure with internally inverted spikes crafted using a hybrid structure of CRMO (chromium molybdenum) steel, the M1000 chassis is effectively isolated from external vibrations. The physical isolation from vibration improves the output signal accuracy and enhances the power and vibrancy of sound produced by the amplifier.



### UNWAVERING ACCURACY AND HIGH EFFICIENCY

To achieve superior speed and energy, the M1000 is engineered with a Class D output stage combined with a power supply circuit design featuring a high capacity (1 kVA-class) toroidal power transformer and specially designed electrolytic capacitors. Additionally, TAD employs very low on-resistance power MOSFETs with no lead wires that provide low-loss, high-speed performance. The result is high signal purity, accuracy and superior high speed amplification directly transferring the energy from the power supply to the speaker. Thanks to the high efficiency of this Class D amplifier design, the M1000 produces high power output without requiring large, external heat sinks, allowing the design aesthetic to match the unique shape of the TAD Evolution series.





## ME1 MICRO EVOLUTION ONE | SPEAKER SYSTEM

### UNIQUE TECHNOLOGY CONCENTRATED IN A COMPACT BODY

TAD introduces the compact bookshelf-type speaker system Micro Evolution One, further perfecting TAD's sound concepts of high-dimensional sound imaging and soundfield immersion. Inheriting the design concept of TAD's Evolution series, the ME1 is equipped with a 16-cm woofer and 9-cm Coherent Source Transducer (CST) Driver to achieve even more outstanding sound quality throughout an entire room and extremely sharp imaging. It also incorporates TAD's Bi-Directional Aero-Dynamic Slot (ADS) port, enabling the reproduction of natural, deep bass sound despite its compact size.



\* ME1 mounted on optional speaker stand ST3

\* ME1 mounted on optional speaker stand ST3

## SC-030M | SC-025M | SC-020M

### SPEAKER CABLE



Oxygen-Free copper wire made by the Dip-Forming process is used for this cable. Compared with standard oxygen free copper wire, the surface of this cable is very smooth, and it's difficult for ultra-fine particles such as hydrogen to penetrate to the inside.

As the result, the grain boundary is stable, and its electrical conductivity is higher than that of standard oxygen free copper wire, so it is possible to transmit pure audio signals without signal degradation.

Additionally, since this cable has a shield structure wound with magnesium alloy foil combined with magnesium cutting filters located to each side of the cable, it has abilities to absorb vibration and shield electromagnetic waves, expanding the dynamic range and reducing noise.

The outermost shell of this cable is a fabric knitted from 0.25 mm PET (polyethylene terephthalate) monofilament yarn. Fabric created from soft and stiff PET monofilament can release the cable from the mechanical stresses coming from the installed environment and support pure signal transmission. As the result, a rich and lively signal transmission is realized.

- ▶ Length: 2.0 m (TAD-SC020M)
- ▶ Length: 2.5 m (TAD-SC025M)
- ▶ Length: 3.0 m (TAD-SC030M)



## SOUND IN VIVID TRUE COLORS

TAD's micro CST<sup>®</sup> Driver, created to produce truly natural sound. With the 14cm CST Driver already having a proven record of success, the 9cm micro driver has been made even more compact in pursuit of the point sound source concept. In addition, the directional characteristics of the coaxially configured midrange and tweeter have been matched to eliminate audio interference. The tweeter diaphragm represents a superior standard of design, produced from lightweight, high-rigidity beryllium. Over a wide band from 420Hz to 60kHz it delivers outstanding stable sound localization and a natural sound field space. \* CST: Coherent Source Transducer



## INCREDIBLE, EXPANSIVE MID AND BASS

The 16cm woofer employs the new MACC<sup>®</sup> Diaphragm that has enhanced strength and low internal loss for ideal vibration characteristics, as well as a magnetic circuit with outstanding linear drive characteristics. This diaphragm employs Aramid fabric and non-woven materials that are separately formed then laminated, achieving rich and smooth mid and bass tones free of coloration with excellent linearity.

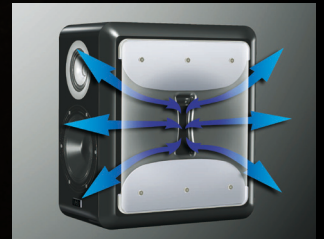
\* MACC: Multi-Layered Aramid Composite Cone



## RICH AND NATURAL LOW TONES

An innovative approach to achieving ideal sound: the Bi-Directional ADS<sup>®</sup> Port. Slit-shaped ports are positioned on both of the enclosure's side panels with flared openings to the front and rear. The symmetrical front-back, left-right layout eliminates the effects of unwanted sound from the port as well as standing waves within the enclosure. Considering the compact size, you'll be amazed at the rich and powerful sound field that will fill your listening room.

\* Bi-Directional ADS: Bi-Directional Aero-Dynamic Slot



## DA1000

DIGITAL / ANALOG CONVERTER

GET A CUTTING-EDGE, HIGH-RESOLUTION EXPERIENCE FOR YOURSELF.



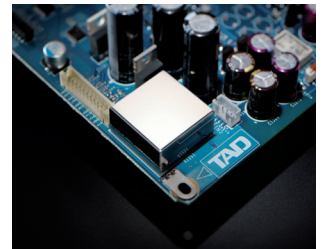
COLOUR OPTION

## PURITY

This model embodies the philosophy and technical standards behind TAD's dedication to conveying all the passion contained within music. Testifying to this is the latest development derived from our top-end, highly praised D600 disc player: the Ultra-High C/N<sup>1</sup> Master Clock UPGC<sup>2</sup>. To ensure precise reproduction with no tonal changes, TAD focused on minimizing low frequency distortion caused by noise from the clock itself occupying the same spectral region. Designed to achieve a pure low-noise signal approaching the upper limits of audibility, our highly innovative master clock is featured in this model.

## PRECISION

To convey all the emotion and passion of the original source, reproduction must be precise and pure. A natural consequence of TAD's relentless pursuit of this audio philosophy, the Ultra-High C/N Master Clock UPGC is combined with high-quality, parallel connected, dual differential independent D/A converter ICs for both the left and right channels. To reduce residual noise, even at high sample-rates, a discrete I/V conversion circuit is utilized. D/A conversion with virtually flawless accuracy is now a reality.



## AUTHENTICITY

All internal parts and circuits are designed and constructed with care and precision. From the careful alignment between the theory and practice behind our selection, and use of component parts subjected to an uncompromising reiterative testing and auditioning process, this is the very essence and DNA of all TAD audio equipment. For example, utilizing high output toroidal power transformers in dedicated independent power supplies for analog and digital circuits eliminates potential mutual interference, and easily handles the power and speed demands of high resolution sound reproduction.



## PROGRESS

We've also included one of our latest developments, the Asynchronous USB Communication Engine. Playback via USB input is capable of handling PCM audio data up to 384kHz/32 bits, and DSD audio data up to 5.6MHz<sup>3</sup>. TAD is now equipped to handle the very best high resolution audio formats to bring you closer than ever to the original musical performance.

<sup>1</sup>C/N: Carrier to Noise ratio <sup>2</sup>UPGC: Ultra-high Precision Crystal Generator  
<sup>3</sup>For Apple Macintosh products. For Windows PCs, PCM audio data is at a sampling rate of 192kHz, with a rate of 2.8MHz in the DSD format.



# SPECIFICATIONS

CST

Woofer

Frequency response

Crossover frequencies

Maximum input

Sensitivity (2.83 V, 1m)

Nominal impedance

Dimensions (WxHxD)

Weight (piece)

Optional speaker stand

Weight (piece)

Analog output terminals

Audio output level

Frequency response

Signal/noise ratio

Digital input terminals

Input sampling frequency

Digital output terminals

Power consumption

Dimensions (WxHxD)

Weight

Analog input terminals

Analog max. input voltage (vol. -40 dB)

Digital input terminals

Digital input sampling frequency

Analog output terminals

Rated output voltage

Maximum output voltage

Rated distortion

Signal/noise ratio

Frequency response

Gain

Power consumption

Dimensions (WxHxD)

Weight

Power output

Rated distortion

Signal/noise ratio

Frequency response

Gain

Input terminal

Input sensitivity / impedance

Output terminals

Power consumption

Dimensions (WxHxD)

Weight

## Reference Series

### R1MK2 | SPEAKER SYSTEM

3-way bass vented box (floor)

3.5cm dome tweeter (beryllium)

16cm cone midrange (beryllium)

25cm cone woofer (x2)

21 Hz to 100 kHz (-10 db)

250 Hz and 2 kHz

90 dB

4 ohm

554 mm x 1293 mm x 698 mm

150 kg



### D600 | DISC PLAYER

balanced (x1), unbalanced (x1)

450 mVrms (1 kHz, -20 dB) (balanced), 220 mVrms (1 kHz, -20 dB) (unbalanced)

4 Hz to 20 kHz (CD), 4 Hz to 40 kHz (SACD)

115 dB

balanced (x1), coaxial (x1)

32 kHz to 192 kHz

balanced (x1)

32 W (standby: 0.5 W)

450 mm x 185 mm x 440 mm (main unit)

220 mm x 185 mm x 430 mm (power supply)

26.5 kg (main unit), 13 kg (power supply)



### C600 | PREAMPLIFIER

balanced (x3), unbalanced (x3)

20 V (balanced), 10 V (unbalanced)

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balanced (x2) (Line), unbalanced (x2) (Line), balanced (x1) (Recording), unbalanced (x1) (Recording)

1.5 V (balanced), 0.75 V (unbalanced)

20 Vrms (balanced), 10 Vrms (unbalanced)

0.0015% (balanced output, 1.6 V, 1 kHz)

120 dB (IHF-A, short circuit)

10 Hz to 100 kHz (-1 dB)

12 dB

52 W (standby: 0.5 W or less)

450 mm x 150 mm x 440 mm (main unit)

220 mm x 185 mm x 430 mm (power supply)

29 kg (main unit), 15 kg (power supply)



### M600 | MONOAUROAL POWER AMPLIFIER

600 W (20 Hz to 20 kHz, THD 0.2%, 4 ohm)

300 W (20 Hz to 20 kHz, THD 0.2%, 8 ohm)

less than 0.03% (20 Hz to 20 kHz, 300 W, 4 ohm)

1 Hz to 100 kHz (+0/-1 dB)

29 dB

balanced (x1)

1.5 V / 220 kohm

custom screw type (x2 pair), bi-wire connection available

520 W

516 mm x 307 mm x 622 mm

90 kg



## Evolution Series

| CE1   SPEAKER SYSTEM   | E1TX   SPEAKER SYSTEM   | ME1   SPEAKER SYSTEM  |
|--|---|---|
| 3-way bass reflex (bookshelf)                                    | 3-way bass reflex (floor)                                       | 3-way bass reflex (bookshelf)                                   |
| 3.5cm dome tweeter (beryllium)<br>14cm cone midrange (magnesium) | 2.5cm dome tweeter (beryllium)<br>9cm cone midrange (magnesium) | 2.5cm dome tweeter (beryllium)<br>9cm cone midrange (magnesium) |
| 18cm cone woofer   | 16cm cone woofer (x2)   | 16cm cone woofer  |
| 34 Hz to 100 kHz   | 29 Hz to 60 kHz   | 36 Hz to 60 kHz   |
| 250 Hz and 2 kHz   | 420 Hz and 2.5 kHz  | 420 Hz and 2.5 kHz  |
| 200 W  | 200 W   | 150 W   |
| 85 dB  | 88 dB   | 85 dB   |
| 4 ohm  | 4 ohm   | 4 ohm   |
| 290mm x 524mm x 446mm  | 350mm x 1215mm x 512mm  | 251mm x 411mm x 402mm   |
| 30 kg  | 46 kg   | 20 kg   |
| <b>ST2:</b> 400mm x 581mm x 511mm                                | --  | <b>ST3:</b> 376mm x 652mm x 461mm                               |
| 16 kg  |   | 16 kg   |



| D1000MK2   DISC PLAYER, D/A, PREAMPLIFIER |   |  |
|---|---|--|
|   | balanced (x1), unbalanced (x1)  |  |
|   | 4 V (1 kHz, 0 dB) (balanced), 2 V (1 kHz, 0 dB) (unbalanced)                                |  |
|   | 4 Hz to 20 kHz (-1 dB) (CD), 4 Hz to 40 kHz (-1 dB) (SACD)                                  |  |
|   | 115 dB  |  |
|   | balanced (x1), coaxial (x2), optical (x1),<br>USB (type B) (x1)                             |  |
|   | 44.1 kHz to 192 kHz (balanced), 44.1 kHz to 96 kHz (optical),<br>44.1 kHz to 384 kHz (USB)* |  |
|   | balanced (x1), unbalanced (x1)  |  |
|   | 43 W (standby: less than 0.5 W)   |  |
|   | 440 mm x 150 mm x 406 mm  |  |
|   | 18.5 kg   |  |



| C2000   PREAMPLIFIER D/A-CONVERTER |   |  |
|------------------------------------|---|--|
|                                    | balanced (x2), unbalanced (x2)                    |  |
|                                    | 20 V (balanced), 10 V (unbalanced)                |  |
|                                    | balanced (x1), unbalanced (x1), USB (type B) (x1) |  |
|                                    | 44.1 kHz to 192 kHz                               |  |
|                                    | balanced (x2) (Line), unbalanced (x2) (Line)      |  |
|                                    | 1.5 V (balanced), 0.75 V (unbalanced)             |  |
|                                    | 16 Vrms (balanced), 8 Vrms (unbalanced)           |  |
|                                    | 0.003%  |  |
|                                    | 120 dB (IHF-A, short circuit)                     |  |
|                                    | 10 Hz to 100 kHz (-1 dB)                          |  |
|                                    | 12 dB   |  |
|                                    | 37 W (standby: 0.5 W or less)                     |  |
|                                    | 440 mm x 140 mm x 393 mm                          |  |
|                                    | 23.5 kg   |  |



| M2500MK2   POWER AMPLIFIER  | M1000   POWER AMPLIFIER  |  |
|---|--|--|
| 500 W (20 Hz to 20 kHz, THD 1%, 4 ohm)<br>250 W (20 Hz to 20 kHz, THD 1%, 8 ohm)                                | 500 W (20 Hz to 20 kHz, THD 1%, 4 ohm)<br>250 W (20 Hz to 20 kHz, THD 1%, 8 ohm)                                       |  |
| less than 0.05% (20 Hz to 20 kHz, 250 W, 4 ohm)   | less than 0.05% (20 Hz to 20 kHz, 250 W, 4 ohm)  |  |
| 112 dB or higher (IHF-A, short circuit)   | 112 dB or higher (IHF-A, short circuit)  |  |
| 5 Hz to 50 kHz (-3 dB)  | 5 Hz to 50 kHz (-3 dB)   |  |
| 29.5 dB (balanced)  | 29.5 dB (balanced)   |  |
| balanced (x2), unbalanced (x2)  | balanced (x2), unbalanced (x2)   |  |
| 1.5 V / 220 kohm (balanced), 0.75 V / 47 kohm (unbalanced)<br>screw type (x2 pair), bi-amp connection available | 1.5 V / 220 kohm (balanced), 0.75 V / 47 kohm (unbalanced)<br>custom screw type (x2 pair), bi-amp connection available |  |
| 250 W (standby: less than 0.5 W)  | 250 W (standby: less than 0.5 W)   |  |
| 440 mm x 170 mm x 467 mm  | 440 mm x 148 mm x 479 mm   |  |
| 43 kg   | 29 kg  |  |

# TAD

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