

LET'S CHECK OUT
THE DETAILS

M1X











Grandioso M1X
Monoblock Amplifier

Design Concepts /
Technical Details

Master Amplification – A New Era

Transforming the full range of music from dignified
silence to surging passion, a new milestone in amplifiers
brings together wisdom and technology.

Grandioso M1X
Monoblock Amplifier



“1,018”

This is the total number of new components employed in the New M1 “X” Edition. 1,018 out of 1,554 components in the “X” Edition, (specifically 90% of the electrical circuitry) have been completely redesigned from the original model*.



* M1 original: 1,098 Components



Dynamic Soundscape

By introducing an inordinate number of new materials, particularly the completely redesigned drive stage and power supply section, the MIX's New signature sound provides music with an extra dimension.

Ultimate Fidelity

Esoteric has been at the forefront of audio innovation. Along with the Grandioso C1X lineage preamp, Esoteric challenges the limits of fidelity in preamp to amplifier signal transmission.



Ultimate Fidelity

Esoteric's unique current transmission system "ES-Link Analog" is the ideal method for preamp to amplifier transmission where the signal level is extremely low. Compared to the conventional voltage transmission, it transmits approximately 100 times more current, making it less susceptible to noise and sending the full energy of the music to the amplifier.

Also, it is not affected by the impedance of the interconnects running between the preamp and amplifier, so it maintains a perfect integrity between the output signal of the preamp and the input signal to the amplifier.



2,400W/ 1Ω

The all-new drive stage has been expanded in size by 150%, from 6 to 12 parallels, while boasting an astonishing power linearity from 300W/8Ω to 2,400W/1Ω*. *Only for music signals.



2,400W/ 1Ω

It delivers sufficient current in a perfect correspondence with the change of load level, effectively meaning you won't need to concern yourself over what speakers you can use. Now, you can enjoy the true sound of the original master, even on music with a wide dynamic range.



The image shows two identical green printed circuit boards (PCBs) mounted in black metal enclosures. The boards are populated with various electronic components, including integrated circuits, capacitors, and resistors. The enclosures have a series of vertical cooling fins on the front and back. The boards are connected to each other via a multi-pin connector. The text 'M1x' is written in a cursive font, and 'New Drive Stage' is written in a bold, sans-serif font. Below this, the phrase 'Simple & Straight Forward' is written in a smaller, sans-serif font.

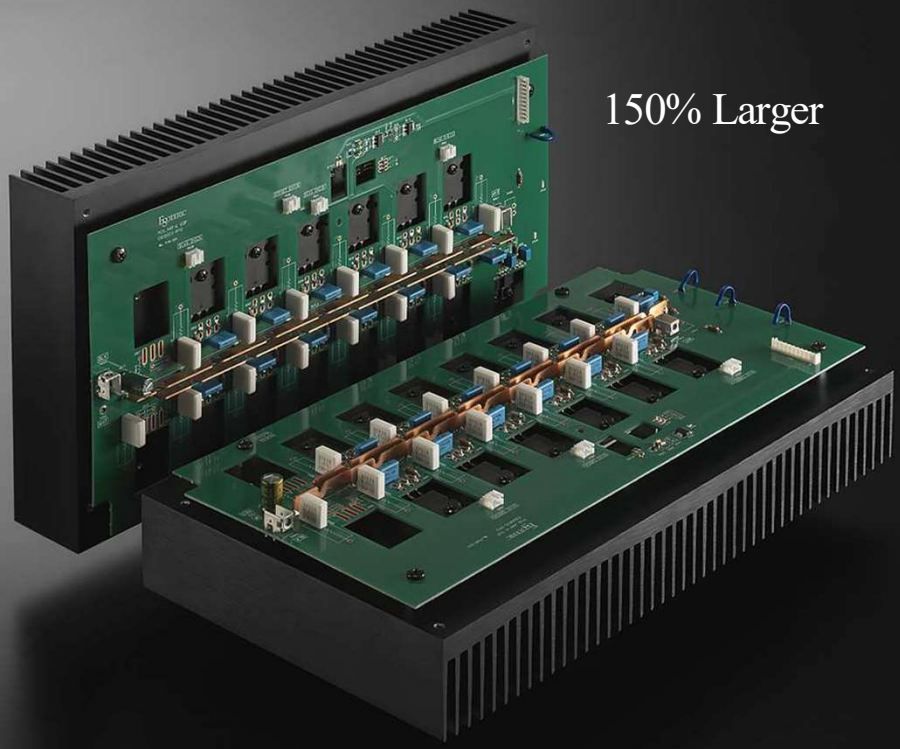
M1x
New Drive
Stage

Simple & Straight Forward

Max

M1

150% Larger



Drive Stage

Mix

- - Power Linearity
 - 300 W / 8 Ohms
 - 600 W / 4 Ohms
 - 1.2K W / 2 Ohms *
 - 2.4K W / 1 Ohms *
 - *Music signals only
- Bipolar Transistors
 - Conventional but sustainable
- 12 Parallel Push-Pull
- Better Thermal Control

M1

- Power Linearity
 - 300 W / 8 Ohms
 - 600 W / 4 Ohms
 - 1.2K W / 2 Ohms *
 - *Music signals only
- LAPT* Bipolar Transistors
 - *Linear Amplified Power Transistor / No longer available
- 6 Parallel Push-Pull

Drive Stage



Infinite Power

Everything about the MIX is done on an extraordinary scale...

Infinite Power

The MIX's incredible power is supported by Esoteric's largest-ever power supply, which occupies approximately 60% of inner space.

The 3,000VA/19kg main power transformer has refined rectification capability (= has faster power delivery) by implementing heavier winding gauge.

Newly developed Esoteric custom capacitors - 60,000 μ F, enhances the amplifier's signature tone.



Max



M1



Drive Stage Power Supply

M1x

- Core Size: 3,000 VA
- Weight: 19 kg
- Heavier Gauge Winding
 - = Better Rectification Capability
 - = Faster Delivery
- Capacitance: 60,000 μF
- Esoteric Custom Capacitor
 - = Better Tonal Quality



M1

- Core Size: 3,057 VA
- Weight: 18 kg
- Capacitance: 39,600 μF



Drive Stage Power Supply

Resolution

The MIX is not only a high power beast, but also is a “master of high resolution”.
No matter how loud you go, you will never lose micro detail of all instruments on the stage.

... Why is this possible?



Resolution

... because the MIX (and all the other Esoteric power amplifiers) has secondary power supply exclusively designed for the pre-drive stage (V amp). The pre-drive stage handles low-level signals from preamp. It's power supply must be stable and independent from the main drive stage (I amp) power supply where extremely high current dynamically swings up and down in accordance with music signal.

Thanks to the exclusive power supply for the pre-drive stage, the MIX will draw forward even the tiniest detail of instruments, even at the climax of a full orchestral pieces.

Main Drive Stage Power supply (1 Amp)



Pre-Drive Stage Power supply (V Amp)



Simplicity Is Excellence

The circuitry of the M1X is surprisingly simple.

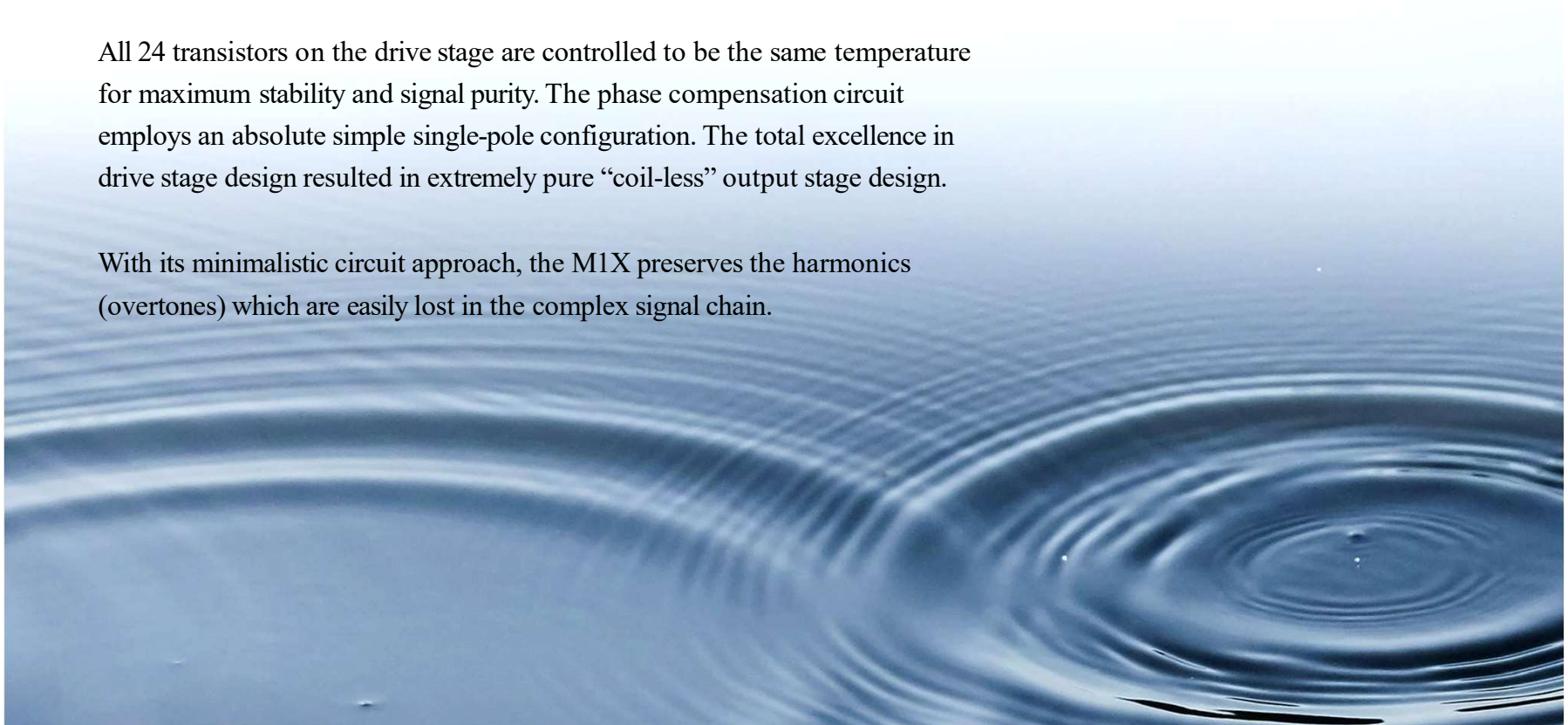
“Simplicity” is an indicator of perfection because it requires the highest level of engineering, expertise, and relentless research process. Simplicity is excellence. In other words, “less is more”.



Harmonics

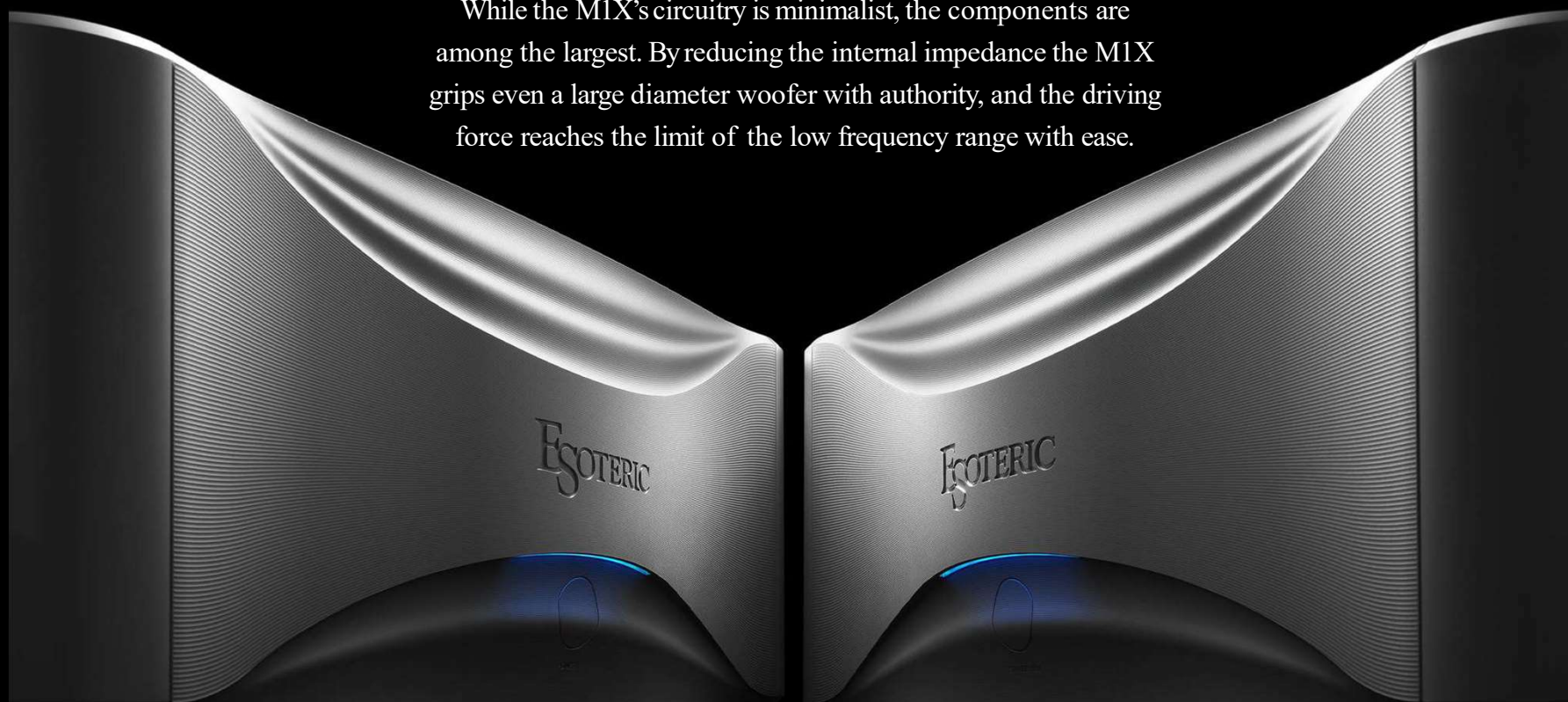
All 24 transistors on the drive stage are controlled to be the same temperature for maximum stability and signal purity. The phase compensation circuit employs an absolute simple single-pole configuration. The total excellence in drive stage design resulted in extremely pure “coil-less” output stage design.

With its minimalistic circuit approach, the MIX preserves the harmonics (overtones) which are easily lost in the complex signal chain.



Into the Deep End

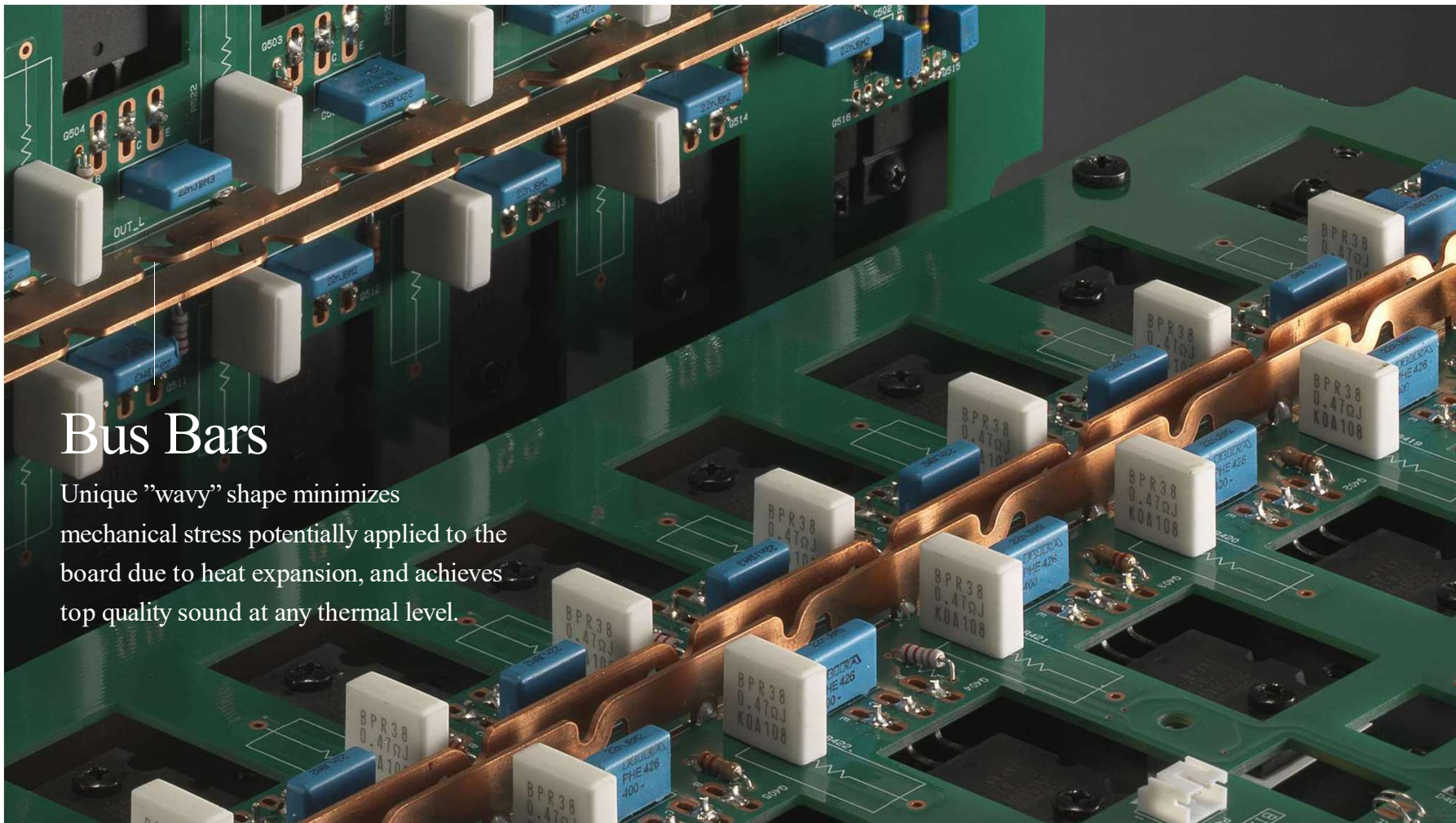
While the MIX's circuitry is minimalist, the components are among the largest. By reducing the internal impedance the MIX grips even a large diameter woofer with authority, and the driving force reaches the limit of the low frequency range with ease.



Low Impedance

- Extra thick copper clad printed circuit boards
- the ultra-heavy gauge cables with secure, lossless bolt on connector system
- Huge bus bars





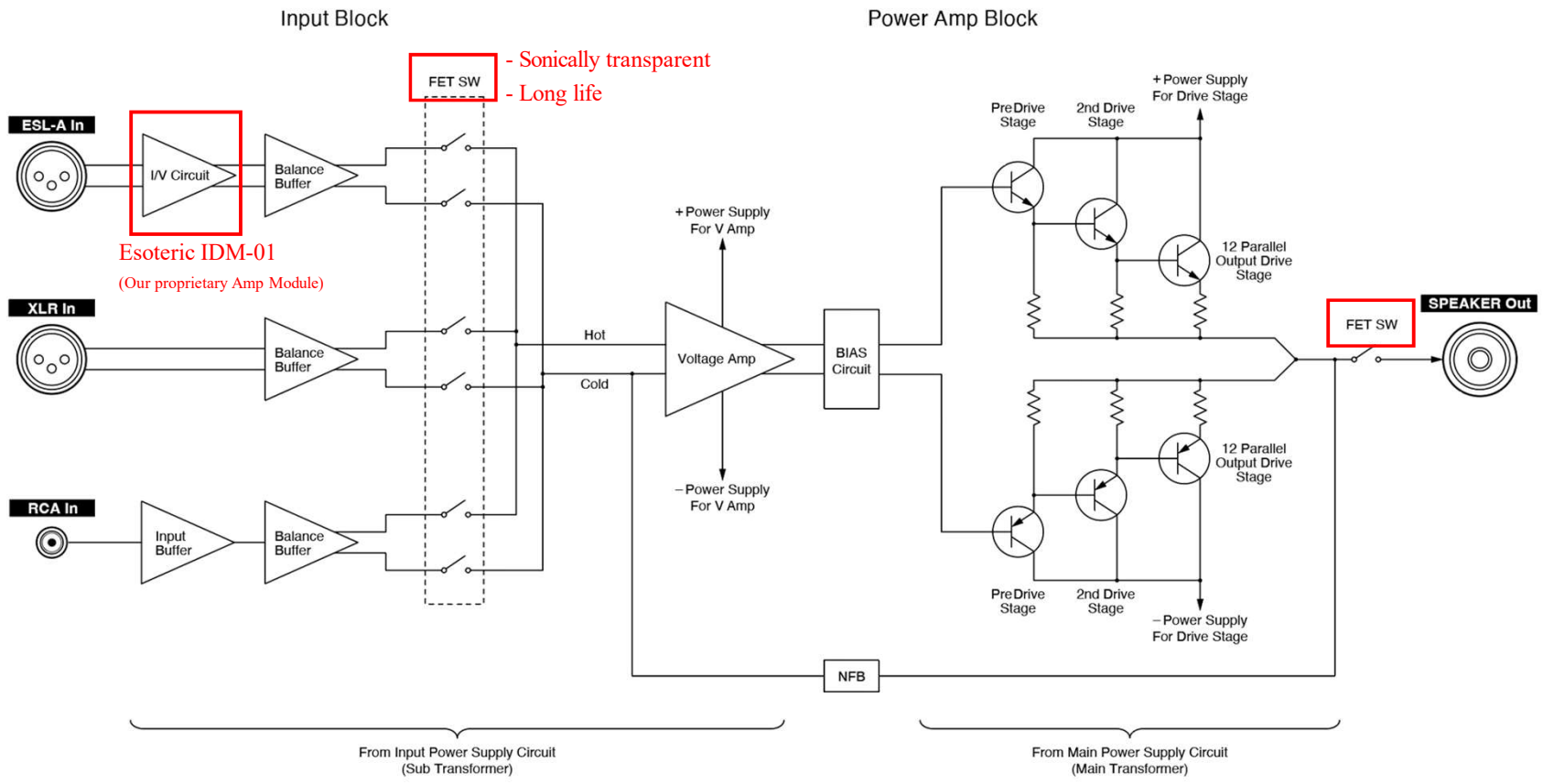
Bus Bars

Unique "wavy" shape minimizes mechanical stress potentially applied to the board due to heat expansion, and achieves top quality sound at any thermal level.



Sonic Gradation

The MIX renders the gradation between climax and silence with amazing subtlety. A newly designed balanced input amplifier greatly contributes to this sonic character.



FET SW - Sonically transparent
 - Long life

Esoteric IDM-01
 (Our proprietary Amp Module)



Mechanical Perfection

The MIX's chassis optimally controls any vibrations that may affect the sound quality to achieve the absolute design goal of "Master Sound Reproduction". Like a Formula One race car, its sleek and clean appearance is a testament to its high level of perfection.

Honeycomb

Top Grille

The thermal control is the key to maximize the output power.
The top panel holes were greatly enlarged so that the amplifier can “breathe” more air than the original design.



Max



M1



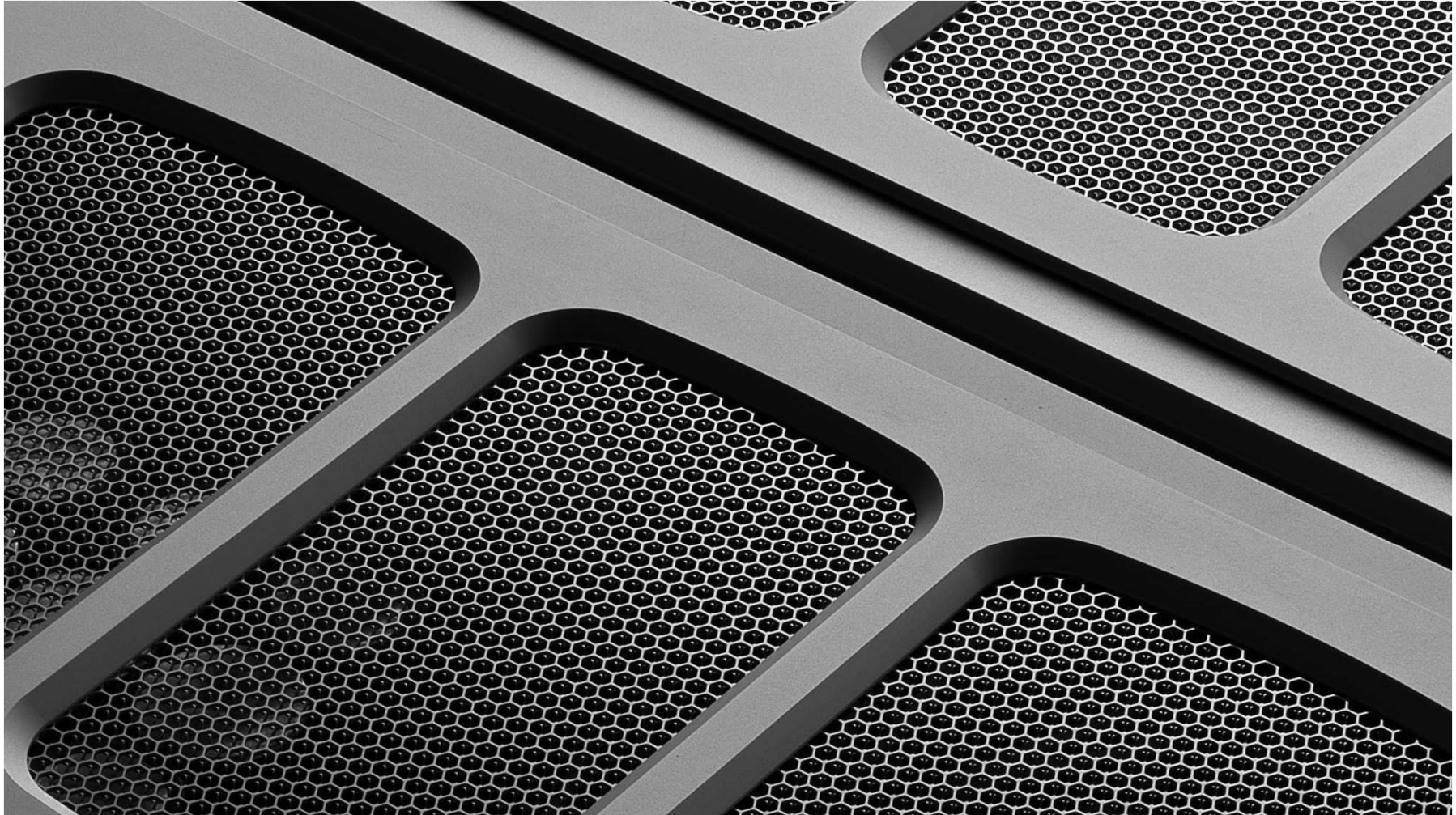
Honeycomb Top Grille

Unexpectedly, this improved grille became one of the most “eye catching” feature of the MIX.

The new honeycomb grille consists of two different gauge stainless steel plates stacked together with offset hole positioning. It provides a unique, complex texture to your eyes when you look at it closely...

...and when looked from distance, the honeycomb texture are distracted, and the internal components are visible through a shiny, almost half-transparent-mirror-like grille surface.









Dispersed-Resonance Heat Sink

In general, the heat sink has a strong peak resonance. The one used for the MIX features random-length fins that effectively disperse resonance peak. The end result is a very neutral sound across the entire frequency range.



Summary



Totally New Design

1,018 / 1,554 pcs of new components
90% of circuits are all new.

Key Update 1: ES-LINK Analog

Our proprietary “current” signal link
x100 more current than V link = powerful, noiseless
Free from “impedance” issue of cables.
-> Perfect pre - power signal transmission integrity

Key update 2: Drive-Stage

x6 -> x12 parallel push-pull
150% larger physical dimension
Improved power linearity up to 2,400W/1Ω
Advanced thermal control -> Better stability and purity

Key Update 3: Main Power Supply

3,000VA/19kg
Heavier winding gauge -> Faster delivery
Esoteric Custom Capacitors (60,000μF)

Summary



High Resolution

Independent, Pre-drive stage power supply maintains “high resolution” even at Loud volume level

Rich Harmonics

“Less is More” - simple & straight-forward concept, red by the most technical, complex engineering approach.

Single-pole phase corrector

Coil-less output stage

Excellent Woofer Grip (Low Impedance)

Extra thick PCB copper conductor printings

Huge Bus bars

Heavy gauge wiring /w Bolt-on connectors

New, Balanced Input Amplifier

IDM-01 (In-house design Amp module)

FET switch (more transparent sound, long life)

Summary



Advanced Mechanical Construction

Rigid but flexible

T35mm front panel (Super rigid, beautifully engraved)

Semi-floating top panel (vibration control)

Dual-layer honeycomb top grille (improved thermal control)

“Wavy” bus bars (heat expansion proof)

Dispersed-resonance heat sink (no resonant peak)

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Audio performance

Rated output	300 W (8 Ω) 600 W (4 Ω)
Frequency response	5 Hz – 100 kHz (+0 dB, –3 dB, 8 Ω)
S/N ratio	119 dB (IHF-A, XLR)
Total harmonic distortion	0.006% (1 kHz, 8 Ω, 300 W)
Compatible impedance	4 Ω – 16 Ω
Gain	28.5 dB
Damping factor	500
Input connectors	
ESL-A	1
RCA	1
XLR	1
Input impedance	
RCA	10 kΩ
XLR	100 kΩ

General

Power supply	
Model for Europe/Hong Kong	AC 230 V, 50 Hz
Model for USA/Canada	AC 120 V, 60 Hz
Power consumption	
Model for Europe/Hong Kong	400 W (55 W when no signal)
In standby	0.4 W or less
Model for USA/Canada	400 W (55 W when no signal)
In standby	0.3 W or less
External dimensions (W × H × D, including protrusions)	491 × 221 × 536 mm (19 3/8" × 8 3/4" × 21 1/8")
Weight	62 kg (136 3/4 lb)
Operating temperature range	+5°C to +35°C
Operating humidity range	5% to 85% (no condensation)
Storage temperature range	–20°C to +55°C

