MEZE
AUDIO

LIRIC

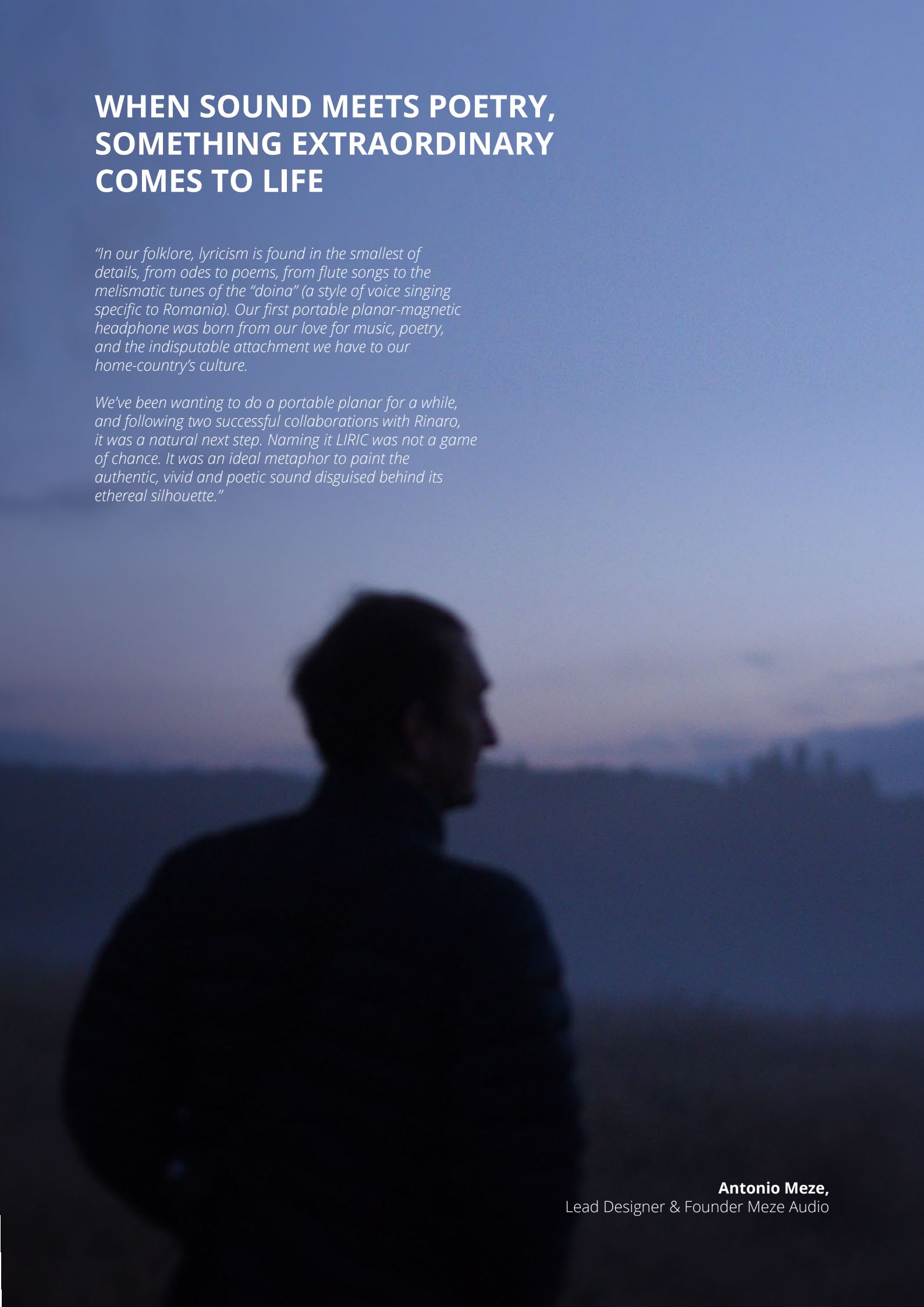
THE PORTABLE ISODYNAMIC
HYBRID ARRAY HEAPHONE

POWERED BY
RINARO
ISODYNAMICS

WHEN SOUND MEETS POETRY, SOMETHING EXTRAORDINARY COMES TO LIFE

"In our folklore, lyricism is found in the smallest of details, from odes to poems, from flute songs to the melismatic tunes of the "doina" (a style of voice singing specific to Romania). Our first portable planar-magnetic headphone was born from our love for music, poetry, and the indisputable attachment we have to our home-country's culture.

We've been wanting to do a portable planar for a while, and following two successful collaborations with Rinaro, it was a natural next step. Naming it LIRIC was not a game of chance. It was an ideal metaphor to paint the authentic, vivid and poetic sound disguised behind its ethereal silhouette."



Antonio Meze,
Lead Designer & Founder Meze Audio

LIRIC is an expression of emotion. A perfect blend of timeless aesthetics, premium materials and the very latest in audio engineering from Rinaro Isodynamics, it is an actual harmony of form and function meant to set a new benchmark in high-end portable audio. Designed for high fidelity listening on the go, LIRIC delivers high build quality, excellent comfort, and a life-like, immersive listening experience.

We wanted it to express the very thing that makes us Meze Audio – cutting-edge technology embodied into an artful, almost sculptural frame. While different than anything we've done before, LIRIC preserves the same design language characteristic to us, with new additions in terms of materials and ergonomic approach.

AWARD-WINNING TECHNOLOGY IN A PORTABLE FRAME

LIRIC features the state-of-the-art technology developed by Rinaro, re-engineered for day-to-day use. The MZ4 Isodynamic Hybrid Array driver was purposefully scaled down and tuned to deliver a similar audio experience with its larger counterpart found in the Empyrean.

Combined with the closed-back design, it helps preserve the original clarity and emotion of your favorite music through enhanced sound and minimized external noise. Each driver is entirely hand assembled and tested in Rinaro's industrial facility in Ukraine.

[MZ4] CASING

Reinforced polymer housing designed to withstand the demanding 10,7N load generated by the Hybrid Magnet Array.

[MZ4] ISOPLANAR® DIAPHRAGM
Weighing only 0.08g with a large active area of 3507mm^2.

[MZ4] HYBRID MAGNET ARRAY
Symmetrically placed on either side of the diaphragm our neodymium magnets are arranged into a Hybrid Array to create a 0.3 Tesla Isodynamic magnetic field required for a uniform activation across the whole diaphragm surface.

RINARO

MZ4 ISODYNAMIC HYBRID ARRAY DRIVER

We have continued our collaboration with Rinaro Isodynamics to create the MZ4 Driver.

LIRIC is the first closed-back headphone to be powered by Rinaro's Isodynamic Hybrid Array driver. Created exclusively for Meze Audio, the MZ4 driver offers the same dual shaped voice coil array seen in the Meze Audio Empyrean. Over 30 years of R&D have gone into developing this technology, resulting in one of the lightest and most advanced planar magnetic drivers on the market.

A new innovation to the MZ4 driver developed in-house by Rinaro Isodynamics is the Phase-X™ system, which improves ambience and spatial sound imaging, often found to be a problem in closed back headphone designs.

ULTRA LOW DISTORTION
Total harmonic distortion (THD) measures under 0.15% in the whole frequency range.

LIGHTWEIGHT
71g combined driver weight designed to create a headphone that offers comfortable listening on the go.

Phase-X™ SYSTEM
Improved ambience and spatial sound imaging through innovative technology.

PATENT PENDING

ULTRA HIGH RESOLUTION AUDIO
Upper frequency limit of audio reproduction is 92,000 Hz.

EASY-TO-DRIVE
100db@1mw/1kHz; 30Ω
Can be driven by almost any portable source without needing amplification.

SCALED FLAGSHIP ISODYNAMIC HYBRID ARRAY TECHNOLOGY
One of the most sophisticated and advanced planar magnetic technologies in the world has been scaled down for portable use.

Patented in US, EU, China and other countries

RINARO

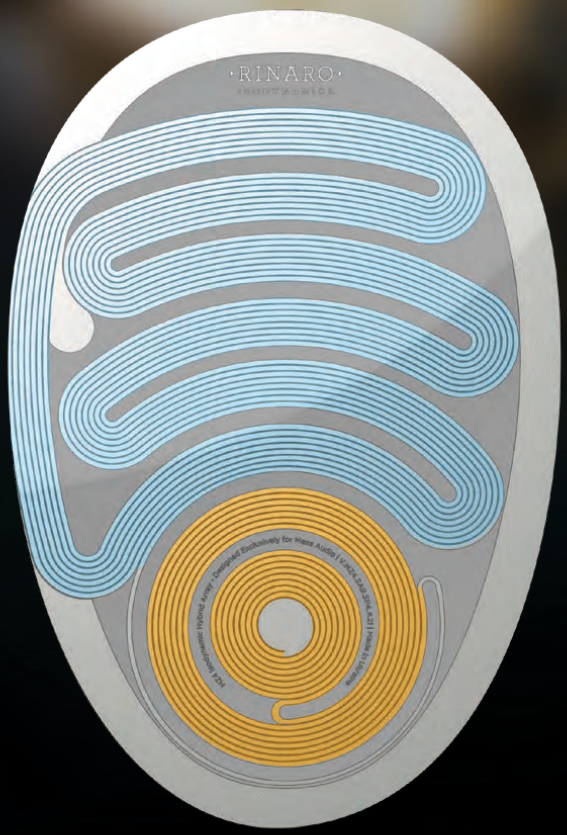
ADVANTAGES OF A DUAL DRIVEN SYSTEM

The MZ4 driver combines individual switchback and spiral shaped voice coils within the same diaphragm, allowing sound to be targeted with more accuracy around the natural form of the ear, for a more selective acoustic performance.

Using this combination allows the headphone to achieve an increased exposure of direct sound wave frequencies over the 10kHz range, as well as improved imaging and localization, by decreasing the impact of short-wave time delays caused by diffused field reflections.

The **switchback coil** is more efficient at reproducing lower frequencies and is positioned in the upper part of the driver.

The **spiral coil** is more efficient at reproducing middle-high frequencies and is positioned directly over the ear canal enabling more direct sound waves to enter the ear without any time delays.



ISOPLANAR® DIAPHRAGM MATERIAL
The diaphragm is manufactured from a custom developed isotropic thermally stabilized polymer with a conductive layer. Through unique processing methods an ultralight yet rigid diaphragm has been achieved.

RINARO

RINARO

IMPROVED EFFICIENCY AT HIGHER FREQUENCIES

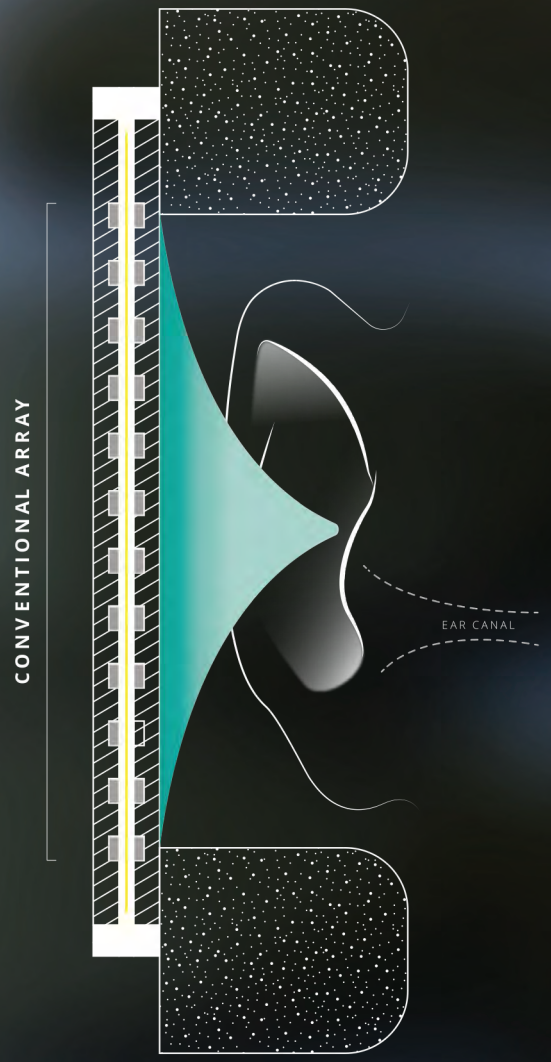
At frequencies above 10kHz, where sound wave length is smaller than the cushions inner cavity, the sound field becomes diffused with an amount of the direct and reflected sound waves within the ear canal.

A significant increase of direct sound waves was achieved by positioning the most efficient part of the diaphragm in mid-high frequencies directly over the ear canal, resulting in improved 3D imaging and spatial localization.

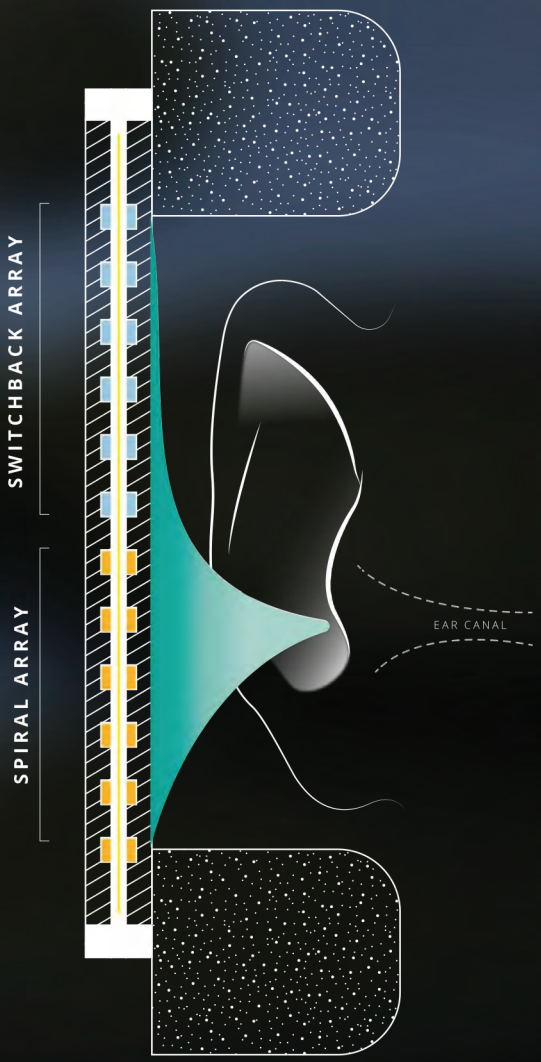
POWER FOCUS

EFFICIENCY OF DIAPHRAGM AT HIGH FREQUENCIES

Conventional Planar Array



Isodynamic Hybrid Array

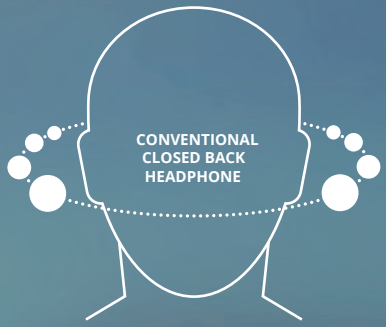


Phase-X™, A REVOLUTION IN SOUND IMAGING

An innovation to the MZ4 driver is the Phase-X™ system created by Rinaro as a way to minimize phase distortion issues typically found in closed back headphone designs. This patent-pending technology helps create an immersive spatial sound imaging. The Phase-X™ system improves the accuracy of spatial imaging in-line with its open back counterparts, especially noticeable on binaural recordings.

ORIGINAL SOURCE RECORDING
Absolute linear phasing offers the listener the original spatial image as it was recorded. This includes information from the instrumentation as well as the recording environment itself.

NONLINEAR PHASING
Nonlinearities in phase response noticeably affect the reproduction of the spatial image of the original recording.



Phase-X™ LINEARIZATION SYSTEM
With the addition of the Phase-X™, Liric achieves a more linear phase response and a faster transient response decay. This allows for a more faithful reproduction of transient sounds and improves ambience and spatial imaging for the listener, taking them closer to the environment of the original source recording.

AN AUDIOPHILE-WORTHY EXPERIENCE ON THE GO

Combining high-end materials with an ergonomic design approach and a sleek, modern finish, LIRIC is made for the audiophiles who want to enjoy their passion in and outside the house, for hours on end.

LIGHTWEIGHT MAGNESIUM SKELETON

A lightweight magnesium skeleton ensures the headphone stays flexible, shock resistant and oxidation free, while maintaining an ideal fit for long listening sessions.

OPTIMAL AIRFLOW CONTROL

Padded headband cushions are symmetrically placed in a “+” shape to allow proper air flow, and lowers the heat and humidity buildup. Covered in genuine leather, the headband is perfectly tuned for optimal pressure distribution - it follows the structure of the head, creating firm and even contact.

Just like all Meze Audio headphones, LIRIC is easily adjustable for a sturdy, yet comfortable feel that fits most head shapes.

ERGONOMIC OVOID SHAPE

The choice of an angled ovoid ear cup shape was perfect for surrounding your ears closely without adding unnecessary pressure or weight, at the same time offering a deeper sound and a better passive sound isolation.

LOVE AT FIRST TOUCH

No detail is left to chance when creating a multisensory experience. With the LIRIC, each texture was carefully selected to complete the other, creating a tactile spectacle distinguishable at first contact. Referencing the textures found on magnesium parts of professional photo cameras, this headphone preserves that same softness to the touch, while demonstrating an outstanding wear resistance.

STRIKING DETAILS

Achieving the highly-refined finish was definitely a challenging process. The union of black leather, gloss-matte spatters on magnesium, and metallic copper accents were the perfect addition to this contemporary aesthetic, completing the portable personality of the headphone.

PRESSURE EQUALIZATION SYSTEM

A precisely tuned air vent hole can make a world of difference in how you perceive the sound around you, that is why we've learned and adapted from our previous experiences and decided to add our Pressure Equalization System in LIRIC's ear cups as well. The result: better controlled airflow, improved ear cup chamber pressure, and a sound that is airy, transparent, detailed and flows naturally, enveloping you into a whole new world of music.

SPECIFICATION

HEADPHONE SPECIFICATION OVERVIEW

Driver Type	Rinaro Isodynamic Hybrid Array® MZ4
Operating Principle	Closed
Ear Coupling	Circumaural
Frequency response	4 - 92,000 Hz
Impedance	30 Ω
Nominal SPL	100 dB (1 mW / 1 kHz)
Maximum SPL	130 dB
THD	<0.15 %
Weight	≈390 g

MZ4 PHYSICAL SPECIFICATIONS

Geometrical Shape	Ovoid
Size	92mm x 63mm
Weight	71g
Casing	Fibreglass reinforced polymer

MZ4 DIAPHRAGM SPECIFICATIONS

Type	Rinaro Isoplanar® MZ4
Active Area	3507 mm2
Weight	0.08 g
Acoustic Mass	6.5 kg/m4
Lower Frequency Limit	4 Hz
Upper Frequency Limit	92,000 Hz

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www.mezeaudio.com