

#### **FACEBOOK**















# The Evolution of HIFIMAN's In-Ear Monitors

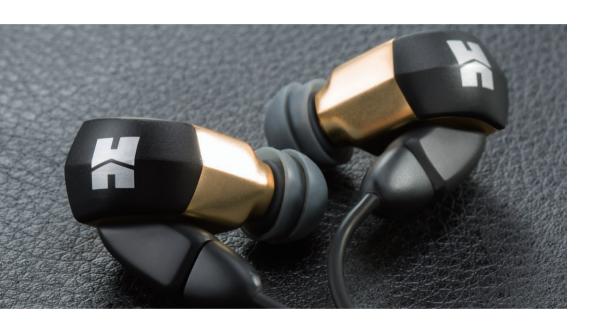


All things in life evolve, they begin in a proto form, a prototype if you will. For us it was back when we were called Head Direct and had the RE2. On the surface the RE2 shared many traits of other things in existence but they were different, special. With the RE2 it was an In-Ear Monitor that used a dynamic driver, common enough but the RE2 was aiming at audiophiles, something no dynamic had ever truly done before. This was something new and wonderful.

In 2007 the first HIFIMAN (Head Direct) tentatively took its first steps out of the water and into the world as the RE2. It was the beginning and like all beginnings, no one knew that it would be the starting point for what would follow. The RE1 soon came behind it, a high impedance IEM but it wasn't until the RE0 that something truly special emerged. The RE0 was a true, high quality, audiophile grade IEM but what set it apart was that it had a dynamic driver. No dynamic ever had such performance before and it slowly grew a cult following. Things paused for a moment, Head Direct became HIFIMAN and work progressed on something spectacular. The RE252, the first Hybrid Coil dynamic driver, making use of two differing coil materials and became the new pinnacle of dynamic driver performance.

After years of research we have the next technological advancement in the world of wideband, Dynamic Driver technology. The "Topology Driver" makes use of the latest methods of technological production to craft and sculpt Nano particle layers upon the diaphragm surface to have an unparalleled level of control. The idea behind the new Topology Diaphragm was inspired by the founder, Dr. Fang Bian's Ph.D. thesis and followed that by carefully controlling the diaphragm surface structure you can yield different results in acoustic performance. The gains in control take on new levels of precision and result in an untouchable acoustic performance and yet with all the tonal consistency and coherency of a single driver with no crossover or the interaction of multiple drivers getting in each other way.

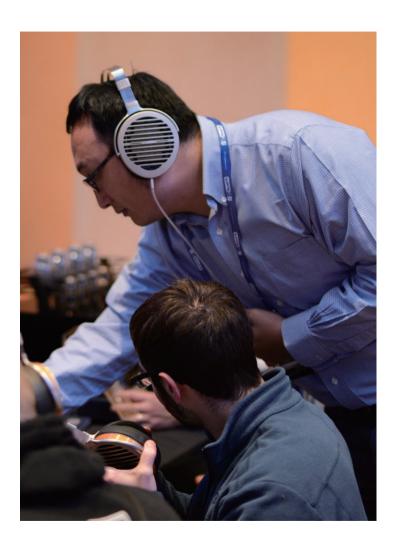
The Topology Driver is presently the finest single driver IEM technology in the world.



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## **Message from the Founder**

Dear Fellow Music lover:

Thank you for your purchase of a HIFIMAN product. We take great pride in offering audio products that provide best-in-class performance and value.

Though it seems like only yesterday when I started HIFIMAN as a passionate audiophile, we just finished our first decade in business and eagerly look forward to an exciting future. The company has grown rapidly and the HIFIMAN brand has become one of the most respected in the industry.

Even with our success, the one thing that has not changed is my passion for music and creating products that help recreate that live experience. Now, I am joined by many others in the company who share my passion and in turn, we humbly share that with you.

Thank you again for your purchase. I hope you will find this guide useful in learning about your product which will help you enjoy countless hours of listening pleasure.

Happy listening,

Fang

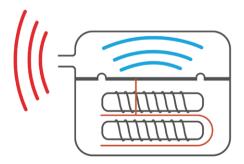
Dr. Fang Bian, Founder and CEO RE2000 Owner's Guide 03 04 RE2000 Owner's Guide RE2000 Owner's Guide

## **The Topology Driver**

HIFIMAN's utilization of advanced depositional technology and research makes for a driver unlike any other in the world. With the creation of Topological, Nano scale layer application technology, upon a driver diaphragm, allows for the manipulation of sound wave creation like never before. No other Driver technology allows for such control and precision resulting in clarity, detail and nuance such that it can best the worlds most complicated multi driver set ups but with none of the coherency and crossover issues.

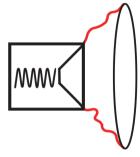
#### **Armature's Inadequacies**

The inadequate soundstaging produced by Balanced Armatures is caused by the way sound waves are formed by armature's multiple wave reflection and diffraction in the driver, which can cause high levels of distortion. Therefore, armature based IEMs have little breadth and yield a sound flat and without emotion.



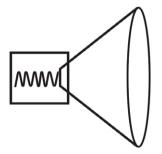
### The Diaphragm Distortions of Dynamic Drivers

Traditional dynamic drivers can produce frequency response alteration due to distortion and vibration across the diaphragm surface.



#### The Ideal Dynamic Driver

The Topology diaphragm structure used by HIFIMAN greatly reduces the uncontrolled diaphragm distortions, enabling the operational performance of dynamic IEM's to an approach to an ever superior, trend towards perfect wave control.



#### What is a "Topology Diaphragm"?

The "Topology Diaphragm" or "Topology Driver" refers to the diaphragm with a special Nano particle coating applied to its surface. The distribution of the coating has distinct geometric patterns. By varying the surface pattern, compound used, the thickness or geometric pattern sound wave formation can be manipulated to achieve the desired audio effect and control. The idea behind the new Topology Diaphragm was inspired by Dr Fang Bian's Ph.D. thesis that "different Nano materials have differing structures and each of those materials have its own properties". Therefore, by carefully controlling the diaphragm surface structure you can yield different results in acoustic performance to a degree previously unobtainable.





## **The Acoustic Channel**

With the application of rigorous user testing and comparisons to more fully understand the acoustic interactions that take place in the sound waves as they traverse from the driver to your ear. This in conjunction with our Topological Driver abilities have allowed us to still further advance the end user experience. The creation of countless prototypes and user testing combined with the Topological driver pattern changes mean your ear encounters the sound wave precisely as the original recording creator intended.



## The Housing

Through a process of repeated and seemingly endless prototyping it came down to three material options. Bronze, Copper and Brass. Just as the proverbial story of Goldilocks and the three bears, the first material, Bronze, was too hard and the second, copper, was too soft. However, Brass, Brass was just right. It being the ideal combination of workability and most importantly gave the best tonal properties with neither the fractional over rigidity of Bronze or the ever so slightly soft Copper. It was, as they say, just right.

The shape of the housing is again an example of blending industrial design, comfort and a striking visual. To the sweeping outer curvature juxtaposed against the angularity of the housing body yet seamlessly fitting into the ear. It at first glance looks like it cannot be comfortable, its angular and striking looks surely cannot be and yet, they most certainly are. The hard and yet soft satin exterior gently nestles itself into the listener's ear where it provides excellent fit, comfort and isolates, all to give you the most wonderful of listening experiences.







## The "H" Connectors

For the first time HIFIMAN has created an In-Ear Monitor with user replaceable cable connections. This means the you can make use of future cable customisations to experience a range of cable types and cable construction materials, from Oxygen Free Copper to pure Silver. The RE2000 can be cabled to meet the requirements and preferences of all listeners.

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## **Technical Data**

#### Specifications

Frequency Response: 5Hz-20kHz

Impedance:  $60\Omega$ Sensitivity: 103dB

Earphone Weight: 13.8g (0.48oz)

Cable Weight: 23g (0.81oz)

#### Physical Attributes

Topology Diaphragm 9.2mm Dynamic Driver Brass Housing

Silver Coated, Crystalline Copper Wire

### Package Contents

- (1) Pair of RE2000
- (1) Pair of Foam Tips (large)
- (1) Pair of Foam Tips (medium)
- (1) Pair of Tri--flange (large)
- (1) Pair of Tri-flange (medium)
- (1) Pair of Bi-flange (medium)
- (1) Pair of Single-flange (medium)
- (2) Dual Pin "H" Connectors
- (1) Cable
- (1) Pair of Ear Guides
- (1) Earphone Travel Case
- (1) Owner's Guide



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#### **How to Wear**

Before using your earphones, make sure the volume is down on your device. There will be a small (R) and (L) on the housing of the earphones denoting the right and left.

Place the earphone in your ear canal using a gentle twisting motion push into your ear canal until you get a secure fit. The cable should exit straight down (fig. 1). You may have to try different size ear tips to get the correct fit and level of comfort.

If you desire to wear the cable in the "over the ear" style (fig. 2), follow the steps above, but the cable should exit to the top at a slight angle. You may need to adjust the angle to get the right level of comfort and secure fit. We firmly recommend wearing your RE2000 up and around your ear for the optimum fit in terms of both comfort and sound.



fig.1 - Normal



fig.2 - Over the Ear

## **How to Maintain**

To clean the RE2000, use a slightly damp cloth. Do not use any chemical based cleaners and make sure liquid does not flow into the drivers. The internal driver should not require any maintenance. If the unit is disassembled, warranty cover will forfeit.

## **HIFIMAN Limited Warranty**

HIFIMAN warrants this product to be free of defects in material or workmanship for a period of three years from the date of original retail purchase. If your product is found to be defective during the warranty period, HIFIMAN will, at its sole option, either repair the product or replace the product with a new or factory reconditioned or substantially equivalent model. This limited warranty does not apply to any defects attributable to damage beyond the reasonable control of HIFIMAN including damage caused by abuse, misuse, misapplication or modifications performed by anyone other than HIFIMAN.

If your product is under warranty and problem appears, please contact HIFIMAN customer service or your authorized dealer. If necessary, and at our discretion, we will provide a warranty repair or replacement of your product.

Caution: do not disassemble or modify the product in any way. Tampering with or modifying your HIFIMAN product will void its warranty.

This Limited Warranty does not apply to:

- 1. Defective or discolored parts if the damages are caused by fluids, dirt, missing keys, broken plastic parts or improper use.
- 2. Damage caused by misuse with another product.
- 3. Use of the product for other than its normal intended use, including, with out limitation, failure to use the product in accordance with the supplied "Owner's Guide"
- 4. Damage caused by accident, abuse, neglect or misuse.
- 5. If you do not have a valid dated receipt showing proof of purchase.

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- 6. Damage caused by services/repairs or other modifications to the system carried out by anyone other than HIFIMAN or an authorized HIFIMAN distributor or dealer.
- 7. Damage caused by self-repair or if the unit has been disassembled or modified in any way.

HIFIMAN greatly desires your satisfaction and will do everything reasonable to achieve that. If you have any questions or concerns with your product, simply contact your authorized dealer or HIFIMAN directly (if purchased from us) and explain the issue in detail. Should a return be required, a RA# will be issued. Return shipping to HIFIMAN or authorized service facility will be at the owner's expense.

The warranty applies to the first purchaser and is not transferable. Should you need warranty service please contact your authorized HIFIMAN dealer. Or email us directly at customerservice@HIFIMAN.com

For any further information or questions, please contact your authorized HIFIMAN dealer. Or email us directly at customerservice@HIFIMAN.com.



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