

LB-acoustics Messgeräte GmbH

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update 002

# Impressions from RMAF – Denver 2017:

Strong interest in the new Mysphere 3.1 from about 200 people – a few comments from the press and private individuals:

- I own many pairs of headphones and I use the one with the sound profile best for the type of music I'm in the mood for. Mysphere gives me the experience of being IN THE performance.
- The Mysphere 3.1 was one of my all-time show favourites. A very natural sound with excellent bass reproduction gives the unique nature of the headphone.
- The headband was something to get used to, but it was quite comfortable and displaced the weight well.
- I will post a picture gallery, Heinz I loved the sound, great first impression.
- These must be one of the most innovative headphone designs ever.
- Mysphere 3.1 are simply the most sophisticated looking, most smartly engineered, strongest, most durable headphone I've ever seen.
- I can easily say these new Mysphere 3.1 are a possible contender for best-sounding headphone of 2018.
- This new LB-acoustic design looks and sounds like the next level in two-channel reproduction and the beginning of the future.
- The Mysphere 3.1 are probably going to end up in my top 5 headphones of all time they were smooth, detailed, refined, spacious, punchy, extended, and I could not find anything to complain about.
- Amazing like the best speakers ever.
- Unbelievable Sound. Incredible how it produces this bass without cushions.
- The smile in my face says everything, it's so real...
- It's phenomena's....
- Excellent product with the flavour of AKG inside. Well done...
- I will go for it, because it's so fantastic design and Sound Image. That's the best ever heard...
- So light open crystal clear and Image. Congratulation!
- Sounds fabulous and can play with my mobile Player as well, great, I came for others but did not expect that!
- This fits better to my Head as any other headphone.

## EDITORIAL



Dear friends of headphones:

This newsletter gives information about the current status of product development and market introduction of headphone MYSPHERE 3.1.

We list feedback from our visit to the Denver Colorado Audiofest where we showed the product for the first time to the public. Some press feedback is also included.

Other notes include:

Ideal wearing (positioning)

Amp pairing

Yours truly,

Heinz Renner Helmut Ryback

### Current R&D status Mysphere 3.1

The development of the driver and the complete hovering housing is finalised. All relevant environmental and lifetime tests were concluded with extremely good results.

The supply base for all parts is organised and approved: 99% EU sourced.

Most of the production equipment is operational, with some still in preparation to be finalized by end of 2017.

Product packaging is developed and final samples to be received in November.

The head-bow needs slight improvement to optimise robust mechanical fixing of the driver housings. This will be finalised end of November 2017.

The cable connector to the head-bow will be changed to optimise functionality.

Typical frequency response of Mysphere 3.1 in free field condition:



#### Amplifier pairing Solid State versus Tube amps

As Mysphere 3.1 offers a low impedance of nominal 15 ohms only, we have received questions about the suitability of this rating for amplifiers generally. We developed the unit for use with today's transportable players as well as the specialised audio amplifier market, and so a low impedance was chosen to obtain high sound pressure when small amps are used. Damping of Mysphere 3.1 is strongly dependent on the output impedance of the driving amplifier. Therefore the driving unit will have a strong influence on sound precision.

Listening tests demonstrate:

- When driven by simple I-phone like amplifiers, Mysphere offers the targeted performance envisaged by the design. Note; such units are not premium audio devices, and so sound and dynamics will of course be determined by the capability of the amplifier in these devices. Yet it's nice to have the option to use Mysphere on the go.
- Using potent solid-state amps, the clarity of sound reproduction increases, with extremely clear bass response, image and soundstage. Purity of sound is conveyed.
- Tube amps give very good results though not in high impedance OTL mode.

The sound generated was perfectly balanced for nearly 100% of Mysphere listeners.

Neither too great nor too little damping over all frequencies. The natural response and character of Tube amps is transmitted by Mysphere.

Finally, we recommend: "Customers should discover for themselves what is preferred, just try Mysphere 3.1"!

All options could be checked at our stand number S03 in room "Soul" at CAN-JAM Europe in Berlin.



#### How to wear (positioning) Mysphere 3.1

As this headphone is of unique design, we offer notes for ideal positioning on the head: Individuals have different inner and outer ears, as well as different fingerprints. Mysphere 3.1 drivers offer flat frequency response in free field in common with "ideal" loudspeakers. When the transducers are positioned cantilevered forward from the headband and suspended in front of the ear channel, they effectively operate like loudspeakers. The transducer position should be set toward the focus point or "sweet spot" of the ear, like placing yourself in the optimal position between stereo loudspeakers. But in case of loudspeakers the "sweet spot" area is much larger, because you're in far field. In case using the Mysphere 3.1, your ears are in area of near field. Therefore the "sweet spot" is smaller and must be adapted by the position of the transducer. As this focus point does not correspond to the ear channel entrance directly and we all have differently shaped ears, trust what you hear while you experiment with placement. Set positions can be measured or recalled by the scale indicated on the headband and guided by a feeling of comfort when worn on the head. This is the method we suggest:



When the best personal position is found, the (adjustable) angle of the driver can still be varied. This mainly influences the bass level around 50Hz (the fundamental resonance of the system), as well as the sound stage. Closer = more intimacy Further = larger sound stage

1. Hold the headphone with the speaker facing forward and down.

2. When the head is tilted forward put the headphone bow behind your ears.

(Note: this movement is similar to put on a hat).

3. Adjust the headband to fit your head in height so the cushion dome fit nicely to your ear pinna.

4. The auricle can adjust in different angle, so you get the optimal condition for listening.

The position of your personal sweet spot will be found more easily by listening to music with many different instruments, or easier still, by a sinus sweep test signal for 3 seconds between 20Hz-20kHz. When listening to this sweep, all frequencies should have approximately the same sound pressure.

Next Homepage update coming soon Upcoming introduction events at CanJam NY and LA

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