

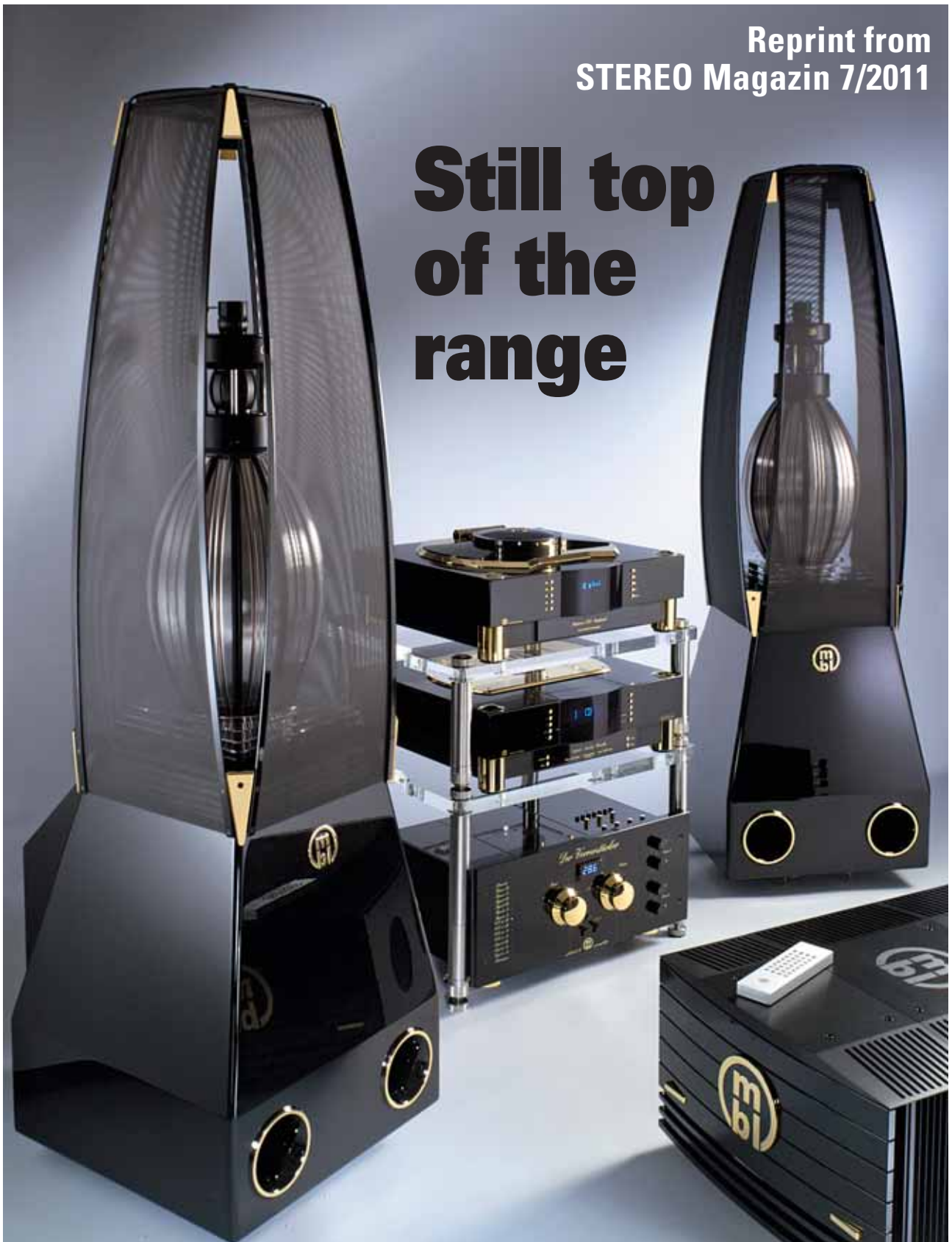
STEREO

STEREO

MAGAZIN FÜR HIFI • HIGH END • MUSIK

Reprint from
STEREO Magazin 7/2011

**Still top
of the
range**



MBL has upgraded its inimitable 101E loudspeaker to an MKII version. STEREO put it through its paces together with the other components of the Berlin manufacturer's Reference Line in the magazine's listening room.

Is there any other stereo system I know better? Not by a long way. No matter how rarefied and exclusive MBL's Reference Line might be, it's the system I'm most familiar with. Perhaps through all those World of HIFI shows where it or parts of it were showcased, reducing many listeners to sheer astonishment. And where I was always careful to bag the presenter's chair.

Because rarely in my life have I had so much pleasure and joy as with the ultimate CD player and D/A converter and the preamplifier, amplifier and speakers that go to make up the Reference Line. A weekend spent with it and sensation-seeking hifi fans (great experiences are there to be shared!) for me is like what you can expect from a weekend break in a five star spa hotel – pure relaxation and absolute pleasure.

What's more, it's pleasure unclouded by risks. Sure, even this system has its little preferences - it shows itself from its very best side, for instance, when paired with WireWorld cables. But it's powerful enough to overcome whatever adversity can throw in its way and delivers a truly impressive performance even under less than auspicious conditions. Put flippantly, you could say that it does its thing – no matter when and where.

How about a full scale orchestra from Reference Recording's superbly engineered "Tutti" sampler including the full dynamic dimensionality of the recording studio sound stage delivered in a listening environment totally unsuitable for audio demonstration? No problem! Immediately followed by "Both Sides Now" where Joni Mitchell, in a dreamy mood, invites listeners to contemplate life's bitter-sweet ironies, leading them into a string section so tenderly rippled that it appears like a shimmering sea bathed in soft moonlight and makes you hold your breath. Once more the Reference Line can do it! From power-

play to moments of intimacy, the expressive range of MBL's Reference Line masters both extremes – and every gradation in between as well.

Apart from its purely acoustic merits, it's the system's ability to convey an emotional drive that binds you to your seat and makes your heart beat faster. Because this system is aiming at your heart. And its aim is true. So who cares if the actual listening environment sometimes really isn't up to scratch? You hardly notice it. As a noted hifi guru recently said to me, the better the system is, the less importance its setting has. If that's true, MBL's Reference Line really is top of the range.



The Radialstrahler for the middle and high frequency ranges consist of narrow, stiff carbon lamellas coated with special lacquer which are distorted by the oscillation coils.

MBL's 101 is unique

So what happens when all listening conditions are perfect? I've heard the Reference Line in all kinds of places that are better forgotten but never before in our spacious and acoustically perfect listening room. The occasion for me to make good on this lost opportunity was that MBL have now upgraded its 101 E speaker to the

MK II version. This classic system is now well over its 20th birthday. That doesn't happen all that often, but like I say the 101 is one of a kind.

Even non-experts can instantly recognize how different it is from conventional speakers. It has neither an acoustic baffle nor any standard type of chassis nor a preferential direction for the sound output.



Right down to the deep bass, the 101 spreads its sound equally and in every direction almost over the whole area, creating an extremely homogeneous energy field which preserves all the sound information even outside of the preferred stereo triangle, the “sweet spot”. This gives an advantage not only for the type of performances mentioned above where by the nature of things only a few of the audience get the best listening places, but in your own home too because you’re free to move about.

With its filigree screen and sculptural forms, the MBL 101 also delivers sound in the tweeter midrange and subwoofer drives. Only not in a flat funnel or spherical shape as conventional speakers do but as horizontal radial beams equally energising all the air they travel through it. The three modules are classically arrayed in the basis box with its internal subwoofer. The tweeter and midrange sound is produced from the upper side by narrow, thin carbon lamellas stiffened with a coating of special lacquer.

Underneath them is the 42 centimetre

high “melon” for the lower middle range which can pack up to a cool 110 hertz. In the lower midrange aluminium lamellas take over sound production. They are reserved exclusively for the 101E MKII and the truly gargantuan 101 X-treme (see STEREO 6/07) while the carbon drivers for the upper ranges are also featured in the smaller MBL models.

The driver itself, on the other hand, is totally conventional. Magnet-driven oscillating coils compress and bend the lamellas to the rhythm of the music thus producing the sound. As the bass range would prove taxing even on a truly gigantic **Radialstrahler**, MBL has opted for a 30 cm woofer in a band-pass filter box connected to the outside volume via two off-set apertures on the front side. MBL says that this chassis is built by a specialist while the ot-

KEYWORDS

Radialstrahler: These create on the horizontal level a perfectly equalised and thus omni-directional acoustic field.

her drivers are meticulously handcrafted in the company’s own factory in Eberswalde (see the box below). Like all the other components of the Reference Line which make a significant difference to the speakers’ performance and are not just there to give them moral support.

A short example will be enough to illustrate what they do. Before the 101E MK II was set up in our listening room, their place was occupied for a few days by Wilson Audio’s famous “Sasha” which had done service as speakers for all kinds of tests. Once the MBL electronics had been assembled, we first connected the American component to them to get a comparison to all the other first-class amp combinations and amplifiers which Sasha had already played.

Exceptional “Order of Amplitude”

And the results were pretty unsettling. The sound spectrum which up till then had always been very generous and well-organised suddenly leapt into a whole new di-

“MBL MEANS HAND CRAFTSMANSHIP & HIGH TECH”

MBL takes the moniker “Made in Germany” strictly at face value. Its modern production facilities cover some 2,000 m2 of a building complex in Eberswalde, some 60 kilometres north-east of Berlin. The factory currently employs 43 people building the casings, mechanical components and natural-

ly the famous radial chassis. Plus the flagship model of Berlin-made loudspeakers, the supremely powerful four-part 101 X-treme (see photo on the bottom left) with a price tag in the order of € 170,000 which features not one but two omni-directional 101E MKII trios.

The printed circuit boards come from a local specialist. MBL also commissions its surface electroplating and wood and lacquer works from other companies. But inspection and assemblage is securely part of MBL’s own programme, which MBL owner Christian Hermeling calls “a blend of hand craftsmanship and high tech”.

Quality is the be-all and end-all because subsequent corrections are very cost-intensive and even practically impossible. The lion’s share of over 90% of production is des-



Christian Hermeling (on the right) has been proprietor of MBL since 2008.

Jürgen Reis has developed all MBL products for 30 years

igned for export. MBL is in demand in more than 40 countries across the world. Indeed the recently launched “Corona Line” has received such a positive customer response that production facilities are now going to be extended by a further cool 800 m2.



The equipment and loudspeakers also come in a range of other lacquer finishes like "Arctic Silver" with fashionable white as the latest addition.



mension and became incomparably higher and broader so that you could hear your way around the actors. Even though full dimensionality was rendered and the bass resonated deeply in the room, I was so perplexed and unsure that I instinctively looked to see if I hadn't wired a box in the wrong way. But everything was ship-shape. The MBLs were simply playing in this exceptional "order of amplitude".

Later on we investigated this phenomenon in detail and compared the Reference Line's D/A converter with our top-reference, with both DACs naturally coupled with the opulently engineered top-loader 1621A driver (circa € 19,000). To keep it short: when it comes to the liveliness and fine details of the performance, the smaller 1511F has no need

STICHWORT

Band-pass filter box: The chassis works between two chambers with the front chamber connected to the immediate outside setting. Can only be used for narrow ranges.

to stand in the shadow of its big brother, the 1611F (circa € 8,000 – 19,000). Only the spacious dimensionality of the 1611F and the naturalness of its acoustic shading mean that the bigger brother ultimately wins the day.

The difference between preamplifiers was even more apparent. Whoever lays out a cool € 18,000 for the 6010D instead of € 7,800 which is the price tag for the 5011, is more than reimbursed with a significantly more differentiated and glowing scale of colours and a much more energised performance. So the Reference Line really does stand a whole cut above the Noble Line of the Berlin vendors, which is part of our top reference range. Small wonder then that MBL's huge 9011 power amplifier (circa € 36,000) could do what it wanted with

the Wilsons, was nimble on its feet with the bass tones and delivered explosively loud passages as majestically as though it was carrying no load from the speakers.

We had two of them at the same time. One pro-MBL box which we controlled from its mono level mode in bi-wiring mode (with separate cabling for the Radialstrahler and woofer). It's hardly possible in any other way because the ports are on the side of the bass box. Obviously the line up of two ultra powerful 9011s – one would have been sufficient at a pinch – and the moderately sensitive 101E MKII is a dream. Their true degree of effectiveness in the room is much higher than the low measurement of below 80 decibels sound pressure might suggest because this doesn't take account of the reflective energy added to the user signal in actual practice.

Sure, this also applies to every loudspeaker that we measure – only the MBL speakers' reflection ratio is particularly high when compared to their total sound output because they don't emit sound in one direction as standard boxes do but distribute it evenly and horizontally in each and every direction. Acoustic Art's muscular AMP II MK2 also worked superbly with the MBLs even though admittedly it couldn't quite attain the same level of majestic performance that MBL own models did.

The main difference to the legacy 101 E lies in the bass section. The old 30er woofer with its epoxy resin membrane has been replaced by a unit of the same size which uses stiff **aluminium sandwich** membranes to make the air vibrate. Chief developer Jürgen Reis has also changed the volumes before and behind the chassis so that they now sound more tautly spanned, louder, and more controlled, thus giving an

even greater degree of contour.

The **band-pass filter** casing attached to the melon for seamless acoustics can just as easily render string passages with the sensitive accentuation of the softly played double basses as it can thrill the listener to the bone with the explosive and fathomless depths of the basses in Rachelle Farrell's "Sister". In such passages the bass doesn't have the dry diction that can be found, say, with Wilson Maxx 3 but rather a luxurious "slam-factor" which can turn MBL listeners into powerplay junkies.

This live recording from Montreux's Stravinski Hall demonstrates just what the 101E is capable of doing. It gives you an exact feeling of the vast dimensions of the sound stage without any displacement even in the loudest and most vigorous passages and without suppressing the discernible ambient noise from the audience. It's a live feeling par excellence of a kind whose grandeur and fine attention to detail can only be found in a handful of loudspeakers.

This combination of meticulous attention to the smallest detail of the colour and dynamic range has always impressed me in the Radialstrahler with its astonishing imperturbability and consistency of sound levels. You can listen to operas with the volume turned up without the voices sounding at all compressed or as if they were screaming which can often very easily be the case. And the soft passages lose none of the charm of the live performance. So much charm and unadulterated pleasure of performance are indeed rare and one of the key hallmarks of all the MBLs I know.

STICHWORT

Aluminium Sandwich: Two layers of aluminium are bonded with epoxy resin giving better characteristics than a thicker membrane could offer.

The MBL doesn't simply play back music, what it rather does is stage the setting where the music was originally performed and create oodles of atmosphere. But if there's one hallmark feature that I usually associate with the Berlin-made Radial-



The one of a kind "melon" for the lower middle range is made of narrow, thin, aluminium lamellas muted on their inside with a foam coating.

strahler, it's not the special way in which it creates the dimensions of the original sound stage, but its particular ability to create excitement and a truly compelling musical experience.

Because in spite of the literally superb "all-round" abilities of the omni-directional loudspeakers, the differences shown by the measuring charts to conventional mono-directional speakers turn out to be less than expected – quite independently of

whether the room acoustics are relatively hall-like or more muted. Like its smaller sisters, the 101E MKII generates no kind of indefinable sound bubble in the room but on the contrary builds a very natural, precisely and consistently ordered, living and breathing sound stage, giving listeners a true feeling of the original recording setting. Just how this can succeed with the rigorous involvement of the room where the music is played remains one of hifi's eternal mysteries to me.

The configuration options given on its rear side – which the ear takes instant account of – show to what great lengths the speaker has gone to exhaust all possibilities. During our measurements we tried to find out whether placing the bridges in different positions would result in changes to the acoustic level – all without the slightest success.

And that's hardly surprising because Jürgen Reis isn't dealing here with differences in the acoustic levels as is usually the case but is using various wires in the high-frequency range: braided copper wire for "natural"; solid copper wire for "smooth", and silvered, thin-braided copper wire for "fast". In the midranges differences are created by the different core materials of the connected coils while in the "attack" bass the melon is moved very slightly forward in time.

To sum up, the upgraded version of the 101 embodies a combination of perfect balance and ravishing musicality. No doubt about it: the upgrade of the MKII has moved its quality up by quite a few notches. Without forfeiting its famous screen, its hallmark melon and not a drop of its charm.

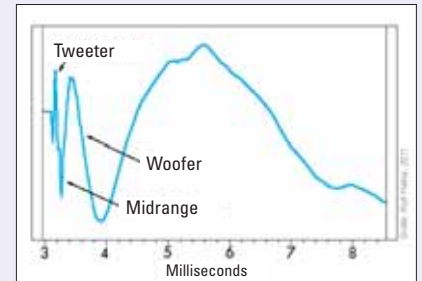
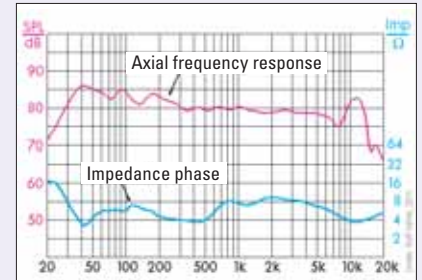
Matthias Böde

MBL 101E MK II



Pair of speakers: around € 48,000 (colours: piano black, white or silver)
 Dimensions: 45x155x50cm (WxHxD)
 Warranty: 5 years
 Distributors:
 Wert-Anlage Audiosysteme
 Tel.: + 49 (0)30 804 960 88
 www.wert-anlage.de

Taken as a whole, the MBL 101 was always and still remains a unique and truly superlative loudspeaker which brings the magic of an exceptionally authentic musical sound to the living room. It is very difficult to escape the magic of the spell it casts.



MEASURING RESULTS*

Nominal impedance	4 Ω
Minimal impedance	3,3 Ω at 42 hertz
Maximal impedance	16,9 Ω at 21 hertz
Mid-range sensitivity (2,83 V/m)	79,4 dB SPL
Power feed for 94 dB (1 m)	33,3 W
Lower cutoff frequency (-3 dB)	25 Hertz

LAB COMMENTS

Even, steadily falling frequency response up to the higher tones, as can be expected from an omni-directional speaker. Our measurements blended out the reflective energy added by the room which explains the at best only moderate degree of efficiency. Under normal conditions this would be much higher. In real-world conditions the MBL is extremely balanced. Non-critical impedance mainly moving in the four to eight ohm range. Average timing, yet the "melon" goes deep enough ensuring seamless coupling of the woofer.

STEREO-TEST

QUALITY OF SOUND	99%
VALUE FOR MONEY	★★★★☆
VERY GOOD	



The configurable acoustic options can clearly be heard. They are mainly realised through the use of different materials.

* Further measurements and diagrams can be viewed by subscribers in the STEREO Club at www.stereo.de

