

THE INNOVATORS OF INVISIBLE.

mina was founded in 1999, with an exciting idea. Turning a lightweight flat surface into a vibrational sound-board structure, essentially turning it into a natural musical instrument. We wanted to push the boundaries, completely turning the conventional loudspeaker on its head, moving away from pistonic devices, to focus on something a little different: Distributed Mode Loudspeakers (DML). The original concept behind DML came from work at the British Ministry of Defence in the early 1990's. They were trying to replicate the intense sound and feel of a real helicopter in a simulator.

We realised that this technology could create something much more sophisticated than just helicopter sounds. Stepping away from pistonic devices allowed us to create something completely different. These could be flat images on a wall, things that don't look like a speaker but repoduces sounds with the all encompassing characteristics of the natural musical instrument.

Amina has moved a long way from the early days. Our passion to constantly challenge our own products, investing in thoughtful R&D with our very talented team over the last 22 years means we are the leading DML invisible speaker company on the market. We are proud to be the specialist in creating immersive experiences through our invisible speakers. We continually push the boundaries, meaning our clients get the most out of their spectacular spaces. Richard Newlove

MD and Founder.





20 YEARS OF ENGINEERING

mina was created with a simple goal in mind, custom Imade high quality audio reproduction for the aesthetically concept we now have 14 patents conscious. Every day we made across the world, and have just created a new product. Musical pictures our 10th generation invisible product. graced walls, ceiling tiles created a We are proud to continuously push great working environment in offices the boundries with our commitment and we even created a musical bath! to the R&D of DML technology, which

ur first invisible speaker was actually created on the back of a challenge.

A German bank approached the team, wanting the most discreet audio solution possible, without even a slim shadow-line showing. With their challenge set, the Amina team returned to the UK and created an weight of 2mm skim-coat of plaster. They agreed with the bank that if they liked it and it worked, they would pay, if not they wouldn't be charged and it would remain unused in the wall. The client loved the result, so much so, that a site-worker broke in and tried to steal it one night, luckily unsuccessfully.

This was the start of aesthetically perfect sound.

ince then, our products have moved forward in leaps and bounds. Taking that original has made us specialists in our field.

ne of the ways we remain at the top of our game is with state of the art virtual modelling. This, combined with our extremely talented engineers, means that we can test and verify new innovations, however minor, in our designs, invisible speaker 'tuned' for the without creating any waste. This means we can push the boundaries of what is possible in terms of audio performance and product reliability. Each of our products use our unique driver technology developed by Amina. In-house technical ability has also enabled us to create two different panel materials optimised for either fully plastered over and dry-line solutions. We are the first company to use two completely different panel materials for each line, designed specifically to sound the best for each install method. (Edge& Mobius)

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BENEFITS OF DML

Distributed Mode Loudspeakers

'Good Vibrations'

he magic of DML is what makes Amina series can be concealed, not just with a speakers so special. Replicating the way a natural musical instrument effortlessly of finishes such as wood, wood veneer, fills a space, without deafening the musician, DIBOND®, leather, sheet slate, marble and is what gives us our edge. We work with these many more. Both Mobius and Edge speakers good vibrations, not against them, to produce high clarity, room filling sound. It's hard to imagine, but it really works. Don't believe us?

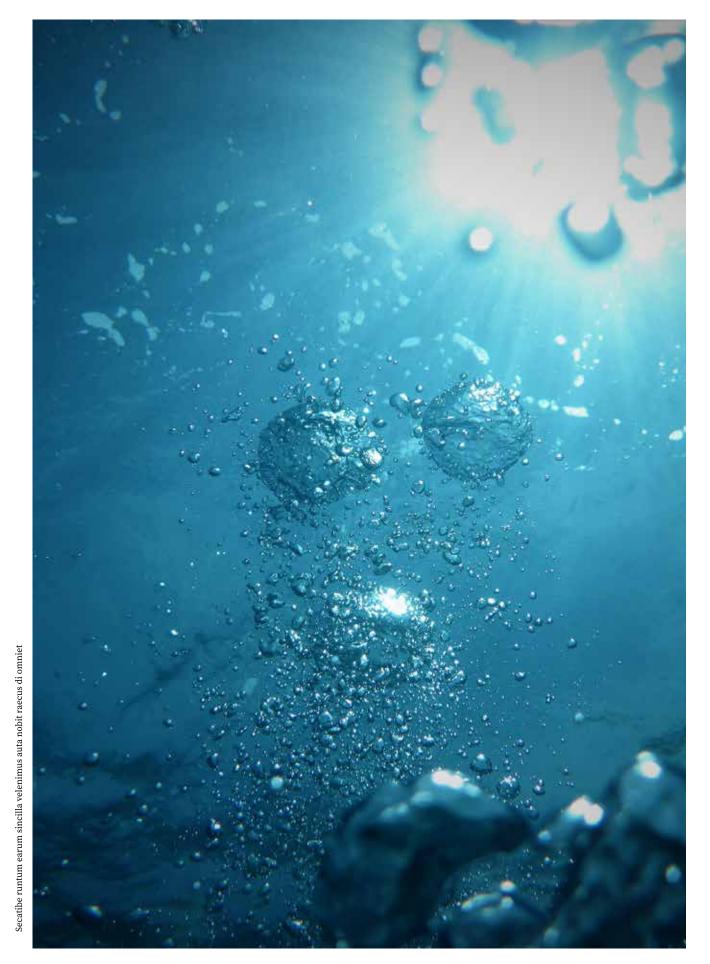
We would recommend listening to a demo to hear for yourself. Contact us for details of your nearest experience centre.

apitalise on the benefits of using DML:

- · Lightweight, single person install.
- 180° hemispherical dispersion right across the frequency range means fewer speakers are needed to maintain even SPL across a space. Fewer speakers means invisible is a competitive solution to propose to your clients.
- Speaker positioning is not as critical as with conventional speakers giving more flexibility in design, installation and location.
- Truly invisible in application.
- · Ultimate design flexibility. The Mobius

plaster skim coat, but also with a multitude can be decorated with paint or wallpaper, as required, once installed.

- Cleverly designed to be integrated into the plasterboard and between joists, Amina speaker do not require additional support or frameworks to install. This reduces accoustic energy being transmitted directly into the building infrastructure.
- DML is an excellent solution for acoustically harsh spaces where conventional speakers create reduced intelligibility. The piston like operation of a conventional loudspeaker establishes a point source of sound. Subsequent reflected energy from hard surfaces interferes with original source, changing the reproduced sound heard. DML, by comparison, creates sound from mulitple tiny sources, or spead source as we descibe it. Being spread source, DML uses reflections in an additive fashion in the way musical instruments do, which we describe as Useful Reflected Energy (URE).



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TYPICAL APPLICATIONS

Residential to commercial and everything in between,



Mobius 5i's were installed into this cohesive space

ML speakers are perfect for modern minimalist, often acoustically harsh spaces. This provides a sound source with zero visual impact on the interior design. Invisible speakers also benefit historic invisible properties wanting to combine 21st Century technology with an authentic look and feel. Amina speakers are used across residential and commercial spaces with stunning results, and offer peace of mind with Amina Care*.

Iith the ability to test a new surface, or have your space custom specified with our complimentary service, we have made it simple to offer speakers as an innovative, perfect, competitive solution.

SUPPORT TOOLS

Plan, demo and integrate with ease.

With such a unique product comes tailor made tools to make invisible sound a simple and easy to implement experience.

ot only are we on hand for any questions, training and advice but we also provide the following to help you sell, specify and integrate Amina invisible sound solutions.

- RIBA CPD
- · BIM Models
- CAD Drawing's
- EASE models
- Specification Service
- Accurate datasheets
- Demonstration Kits
- Application Notes
- Installation Guides
- Animations
- Online learning portal
- Amina Care *
- White-glove installation service**





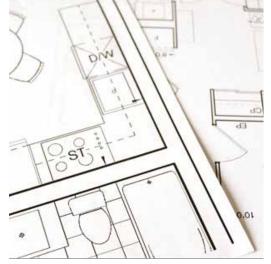












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^{*10} year residential and commerical warranty against manufacturing defects.

^{**}UK only, an experienced and site certified team can fully install and finish Amina speakers.

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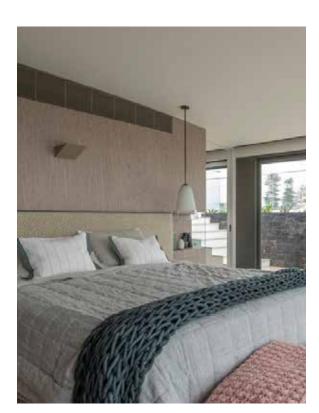
A BETTER FUTURE

s the specialists in invisible sound, we are focussed on creating the best possible invisible solutions consuming the minimal required power and raw materials. Every speaker comes fire, our panel material gives off no noxious with Amina Care, our 10 year warranty against manufacturing defects, but are known to last much longer. Being decorated over means they never go out of fashion, and reduce any need for reaplacements.

ur patented driver technology, utilising DML principles, means in some situations up to four times fewer speakers are required. Not only does these require less labour time, but less wiring and less power applications. This combined with long life expectancy provides a much greener outlook.

■e also use minimal packaging to minimise nonrecyclable waste and, through thoughtful designs, the amount of rare earth elements used in the production process.

he safety of our products has always been a top priority. This means that In the rare and unfortunate event of a





SO WHY AMINA?

mina are the market leaders in DML and the business is entirely focussed on optimizing The technology, through extensive R&D investments, to provide the highest quality sound reproduction with zero visual intrusion.

DML technology speakers use throughout their frequency ensuring consistency in sound output.

DML speakers work well in fashionably acoustically harsh environments.

The speakers are lightweight enabling single person install and become an integral part of the plasterboard making the installation process easy. There are no requirements for attaching to joists or for special frameworks to support the product reducing the vibrational energy being inputted directly into a buildings infrastructure.

Hemi-spherical dispersion of all frequencies means in large areas, 2-4 X fewer speakers are required to maintain an even SPL so less amplification and labour required too.

Amina invisible speakers can be with 100/70V line transformers in commercial applications

Speakers can be redecorated several times during their lifetime and Mobius series can be installed behind a very wide range of materials.

Our specification team are always ready to help with recommendations for speaker selection and placement even in the most challenging projects.



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