

amira®

INVISIBLE LOUDSPEAKERS

PRODUCT
BROCHURE

AUDIO FOR VERY SMART SPACES

CONTENTS

- 4. Introduction to Amina
- 6. Invisible Sound Solutions
- 7. Acoustic and Construction Benefits
- 8. Two Core Technologies
- 10. Edge Overview
- 11. Mobius Overview
- 12. Edge Specifications
- 13. Mobius Specifications
- 14. Subwoofer Specifications
- 15. Support Products

INFO
www.aminasound.com
info@aminasound.com

HEADQUARTERS
Cirrus House, Glebe Road, Huntingdon,
Cambridgeshire, UK, PE29 7DL

©Amina Technologies Ltd. 2019





INTRODUCING AMINA

Audio for very smart spaces.

The world's market leader in the design and manufacture of invisible loudspeaker solutions, Amina Technologies Ltd is a UK based company who has been filling spaces with acoustic ambiance for the last 20 years.

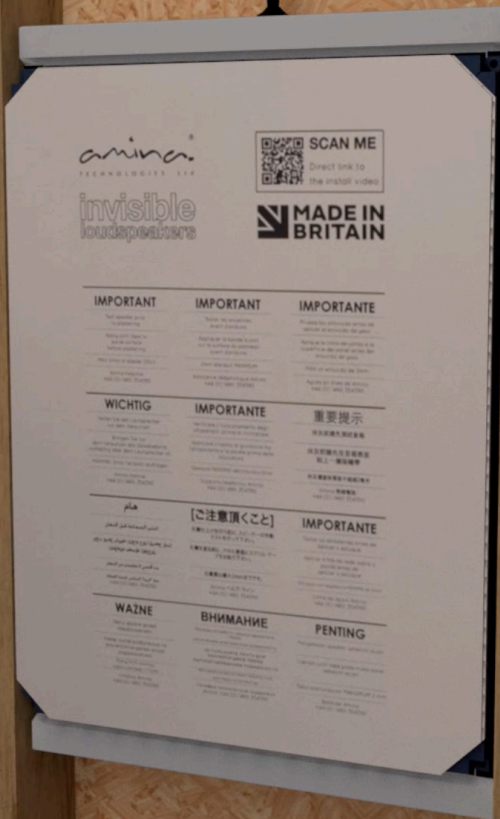
By investing more than ever into R&D, Amina's patented technology provides continued acoustic excellence and is frequently specified by top designers and architects worldwide.

The constraints of the traditional loudspeaker means that they are often too bulky and unattractive, not befitting for elegant and design inspired spaces. The benefit of Amina invisible speakers means there is no compromise between high quality audio and design. Regularly used in residential and commercial spaces ranging from beautiful family homes, modern and historic properties to exclusive hotels, design retail stores,

restaurants, museums and spa complexes, Amina invisible speakers produce a non directional, open sound that fills beautiful spaces.

This open sound is all thanks to the invention of VPT (Vibrational Panel Technology) which uses a cleverly designed panel, with Amina's next generation neo-magnet to create small vibrations to generate sound which can be heard but not seen. The lightweight design can then be seamlessly integrated into any wall, ceiling or flat decorative panel with no visual impact or sound compromise, either during a new build or retrofit.

Amina speakers need no grille or cover and can be installed in a variety of places, depending on the model. The product can be completely plastered over and painted, covered with a thin wood veneer, wallpaper or fabric or even placed into cabinetry and other flat surfaces.



INVISIBLE SOUND SOLUTIONS

Why Invisible?

Increasing demand for integrated lifestyle technology combined with the associated ‘aesthetic-clutter’ that it brings has led to a rise in hidden technology solutions. With 30% of brain power dedicated to visual stimulus and only 2% dedicated to audio, it is clear that the way we ‘see’ sound has a huge impact on the way we perceive it. By removing the aesthetic aspect, it allows complete focus on the audio art-form as it was intended.

How does it Work?

With the invention of VPT (Vibrational Panel Technology), Amina has been able to take the common loudspeaker design and replace the cone with a flat panel. Instead of moving forwards and backwards visibly like a typical cone design, a VPT panel uses small vibrations to generate sound which can be heard but not seen. This allows for seamless integration of a loudspeaker into any wall, ceiling or flat decorative panel with zero visual impact.

Acoustic and construction Benefits

Design and Install flexibility

With a range of different construction methods and finishing techniques globally, Amina uses two core-technologies to allow integration of invisible loudspeakers into any room.

Both technologies are based on the principal of VPT loudspeaker design. Using an electromagnetic transducer, known as an exciter, to impart vibrational energy into a lightweight and stiff radiating panel. This vibrational energy radiates as high fidelity sound.

While it might seem like VPT loudspeakers to some extent ‘reinvent the wheel’, there are a number of key design and acoustic benefits to using a vibrational flat panel loudspeaker over a more traditional design.



Acoustic Benefits

VPT loudspeakers provide full-bandwidth 180° dispersion and generate what is known as an incoherent-phase waveform. These dispersion characteristics allow the loudspeaker to produce smooth room filling sound across the entire listening position. Whether used for low level background music, noise masking, foreground listening or home theatre application, Amina has a range of high fidelity invisible loudspeakers to match any scenario.



Construction Benefits

Consisting of a flat radiating panel and a low profile exciter system, Amina Loudspeakers provide the opportunity to integrate seamlessly with the design of the property. The flat section of a wall, ceiling or piece of furniture can be used to generate room-filling sound while becoming completely invisible once installed.

Part Loudspeaker and part construction material, Amina Invisible Loudspeakers are designed to be just as much a rugged building material as they are a precise acoustic device.

Designed for acoustic excellence, engineered for construction.

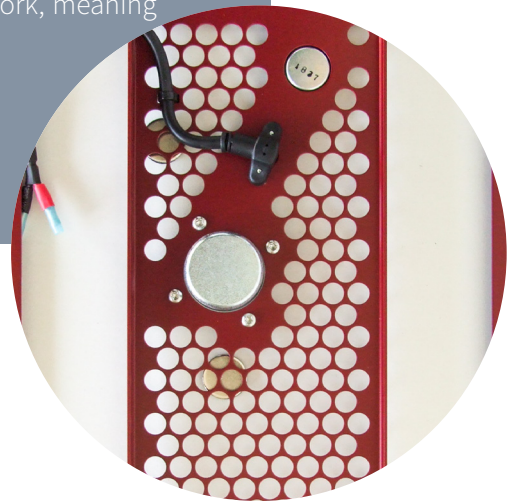
TWO CORE TECHNOLOGIES

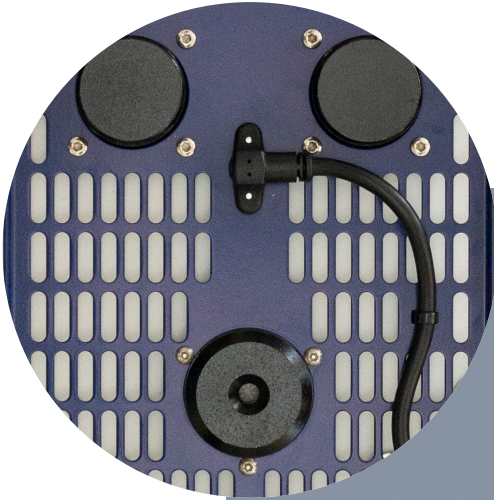
Drywall Loudspeakers

With cavity walls and ceilings being a staple of the construction industry globally, Edge series loudspeakers provide a high performance solution in a lightweight and easy to install package where cavity walls and ceilings have been used.

Designed to replace a small section of plasterboard/drywall, Amina Edge series loudspeakers have their perimeter filled, taped and feathered in the same way that tapered board is installed and finished. The entire wall/ceiling can then be painted and decorated, allowing the loudspeaker to become fully invisible.

The loudspeaker is only ever attached to the plasterboard itself and not the studwork, meaning that no special framing is required.





Fully Covered speakers

Where drywall building techniques are not being used, or for where there is a specialist covering material, Amina Mobius Series loudspeakers provide a flexible sound solution for a range of design-led finishes.

Engineered to work with the covering material, Mobius loudspeakers can be installed into a number of different materials or with a variety of finish options.

Mobius loudspeakers provide ultimate installation flexibility. Covering options include wood, leather, natural stone veneer, wet plaster skim (Cavity or solid block installation) or specialist finish such as acoustic or polished plaster. This includes DIBOND®, a composite material with Aluminium skins, available in various finishes, even including a mirror finish.

EDGE i SERIES



The latest innovation in invisible speaker technology.

A new revolutionary design for invisible loudspeaker technology, the Amina Edge i Series offers smooth low frequency extension with increased power handling and sensitivity, resulting in a dynamic and engaging listening experience that has never previously been heard from an invisible loudspeaker.

Building on the incredible performance of the Amina Mobius series, Amina Edge i loudspeakers incorporate OptiDamping™, OptiDrive™, Reduced-resonance exciter technology and Amina's new (patent pending) ToneRelief™ technology, built into a plaster up-to design. Designed for application within drywall construction techniques, Amina Edge i loudspeakers incorporates a tapered perimeter. Once taped, filled, sanded and painted, the loudspeaker becomes fully invisible. Amina Edge i speakers can also be installed in post-plaster situation (retrofit) where there is a full wet skim (Amina Edge i speakers should not be fully plastered over).

MOBIUS i SERIES

Highly flexible design integration.

The Mobius i series provides the greatest flexibility for interior design integration and installation of any invisible loudspeaker. Delivering incredible high frequency performance across the entire listening position, allowing for perfect reproduction with all the detail and clarity, no matter where in the space you are listening from.

Engineered to work behind a range of covering materials such as wet plaster skim (2mm), wood, leather, or high pressure laminate, to name a few, Mobius Loudspeakers offer the most flexible invisible audio solution available.



EDGE i SERIES



Edge 7i

4 Ohms
75W/150W
90dB 1m/2.83Vrms
55Hz - 27kHz (- 6db)

1.8Kg (3.96lbs)
450mm x 345mm

BackboxCV345
APUi70C_2

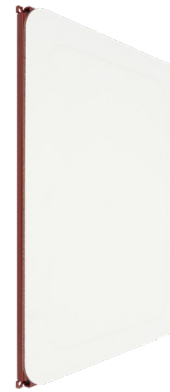


Edge 5i

4 Ohms
50W/100W
90dB 1m/2.83Vrms
60Hz - 26kHz (- 6db)

1.3Kg (2.86lbs)
450mm x 345mm

BackboxCV345
APUi50C_2



Edge 3

8 Ohms
30W/60W
86dB 1m/2.83Vrms
80Hz - 30kHz (- 6db)

1Kg (2.20lbs)
400mm x 300mm

BackboxCV300
APUi30C

MOBIUS i SERIES



Mobius 3

8 Ohms
30W/60W
84dB 1m/2.83Vrms
112Hz - 20kHz (\pm 6db)

1.08Kg (2.38lbs)
400mm x 300mm

BackboxCV300
APUi30C



Mobius 5i

4 Ohms
50W/100W
86dB 1m/2.83Vrms
75Hz - 29kHz (- 6db)

1.4Kg (3.08lbs)
450mm x 345mm

BackboxCV345
APUi50C_2



Mobius 7i

4 Ohms
75W/150W
87dB 1m/2.83Vrms
70Hz - 29kHz (- 6db)

1.8Kg (3.96lbs)
450mm x 345mm

BackboxCV345
APUi70C_2

SUBWOOFERS

Discrete integrated subwoofers using traditional subwoofer technology to add extra warmth all the way to room shaking bass for multi-channel surround sound systems. Vented through a small port opening, Amina subwoofers and bass enhancers are actually designed to be installed into walls, ceilings, cabinetry or even positioned in-room.

Images shown to scale.

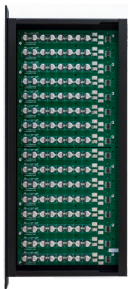


| | ALF40 | ALF80 | ALF120 |
|--|--|--|--|
| Nominal Impedance | 8 Ohms | 4 Ohms | 6 Ohm |
| Power Handling | 60W | 150W | 50W |
| Sensitivity (1m / 2.83Vrms) | 88dB | 86dB | 96dB |
| Frequency Response (± 6 dB) | 65Hz-155Hz | 36Hz - 140Hz | 27Hz-120Hz (with DSP filter applied) |
| Electrical Connection | 3-way binding post | Sprung terminal binding post | Sprung terminal binding post |
| Dimensions | 359mm x 157mm x 134mm (141/8" x 63/16" x 51/4") | 605mm x 270mm x 156mm (237/8" x 105/8" x 61/8") | 1605mm x 345mm x 118mm (633/16" x 131/2" x 43/4") |
| Weight | 3.2Kg (7lbs 1oz) | 9.2Kg (20lbs 4oz) | 17.5Kg (38lbs 9oz) |
| Fixing Requirements | L-brackets (supplied) | L-brackets (supplied) | Felt isolation pads (supplied) |
| Protection / Crossover | Built-in | Built-in | External DSP required (not supplied) |
| Rack-mount Protection Unit | N/A | N/A | N/A |
| Warranty (Residential/Commercial) | 2 Years | 2 Years | 2 Years |

SUPPORT PRODUCTS

APU-RS1C

Passive rack-mounted protection unit for Amina low-impedance Invisible Loudspeakers. For use in installations with higher numbers of low-impedance speakers with a centralised AV rack. Direct-to-PCB screw terminal-blocks allow for fast and easy permanent installation. Either 8 or 16 channel options available.



APU1C

Single channel in-line protection unit for use with all low-impedance Amina loudspeakers. Connected to the output terminal of the amplifier before the loudspeaker cable to allow maximum loudspeaker performance for a lifetime. Can be easily dressed back with any cable management system



BackboxCV (cavity wall/ceiling)

Cavity wall backboxes are an easy to install mounting option for Amina loudspeakers into plasterboard cavity walls and ceilings (drywall). Creating an acoustically tuned cavity behind the speaker, ensuring both consistent loudspeaker audio quality as well as minimising rearward airborne sound transmission.



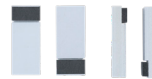
BackboxSW (solid wall)

The BackboxSW provides a mounting option for solid or block walls and ceilings with Amina Invisible Loudspeakers [not suitable for installation of Edge Series loudspeakers].



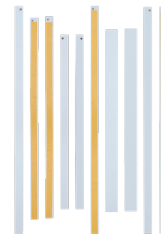
Mounting Blocks

For use when there is insufficient cavity space for an Amina cavity backbox (less than 75mm). Allows installation of Amina loudspeakers into plasterboard with a rear cavity depth of just 30mm (rear of loudspeaker should be covered using soft insulation material where mounting blocks are used to prevent ingress of debris over time).



Shims

Shims available to allow alignment of speaker and backbox with any thickness plasterboard other than 12.5mm (1/2") (or multi-layered build-up), ensuring that no more than 2mm plaster is applied to the front of a plaster-over loudspeaker. Shims can be used for alignment in a retrofit installation or alignment of Edge Series speakers.



Transformers

Providing a great solution for high-end commercial installations, all Amina Invisible Loudspeakers can be supplied with high-quality toroidally wound transformers for both 100V and 70V line systems. Available in either multi-tapped or fixed power varieties for the most flexible commercial installation of Invisible Loudspeakers.



amina®

UK

Cirrus House
Glebe Rd
Huntingdon
Cambridgeshire
PE29 7DL

US

Fort Lauderdale, FL
33312, USA

CHINA

No. 28
Jinyuan Zhongxin
Minhang
Shanghai

www.aminasound.com

info@aminasound.com

+44 (0) 1480 354 390

©Amina Technologies Ltd. 2019

Printed in the UK