

# MOBIUS3iBMT-EN54

HIGH PERFORMANCE HI-Z VOICE EVACUATION PLASTER-OVER  
LOUDSPEAKER WITH INTEGRATED BACKBOX

DATASHEET Rev. 1.2 | 20-10-2022 | E&OE



**AMINA**  
IMMERSIVE INVISIBLE SOUND

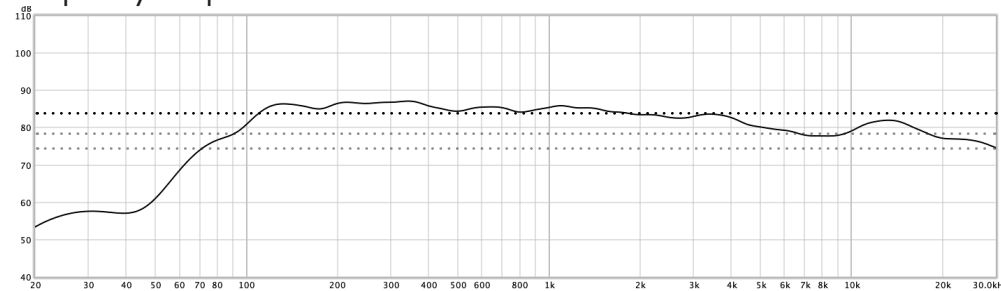
## Product Description

The Mobius3iBMT-EN54 has been developed and certified for use in high impedance fire evacuation systems. Based on the Mobius3i and using the same patented technologies including Optidrive, Opti-damping and Reduced Resonance Exciter technology, the Mobius3iBMT-EN54 features the same hi-fidelity, room-filling and dynamic sound that Amina is known for. The Mobius3iBMT-EN54 is a sealed unit with a new acoustically tuned and fully integrated bacbox design and features a new front-mounting system that automatically aligns the loudspeaker to the perfect depth, making a one-person installation easier than ever before. Designed to be completely covered by 2mm of plaster or other material, the Mobius3iBMT-EN54 is completely invisible in application.

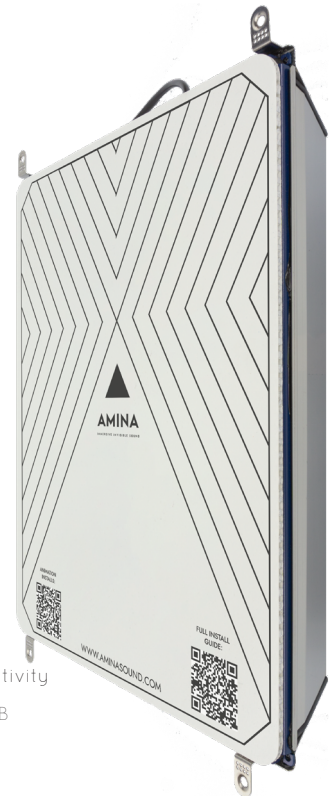
## Example Applications

Mid-high power, high impedance commercial and residential applications where an EN-54 (fire evacuation) rating is required. Designed for dual use - providing high-quality music and media playback as well as voice evacuation duties in a properly configured audio system - an unparalleled solution for projects looking to avoid the visual clutter of multiple loudspeaker systems.

## Frequency Response



Sensitivity  
- 6dB  
- 10dB



## Specifications

### Mobius3iBMT-EN54

Certification	EN54-24:2008
Transformer taps (100V)	5W / 10W / 20W
Input impedance	5W: 2000 $\Omega$ / 10W: 1000 $\Omega$ / 20W: 500 $\Omega$
Frequency range (-10dB)	67Hz - 31kHz
Sensitivity (@1m/2.83Vrms)	85dB SPL 1m/2.83Vrms (with 2mm plaster skim)
Max SPL (@1m/2.83Vrms)	5W: 91dB SPL / 10W: 94dB SPL / 20W: 97dB SPL
Dispersion angle (HxV)	180° x180° @ 500Hz / 180° x180° @ 1kHz / 180° x180° @ 2kHz / 180° x180° @ 4kHz
Rated noise voltage / power	100V / 20W
Electrical connection	WAGO lever lock (up to 12 AWG)
IP protection grade	IP21C
Cabinet material	Steel and multilayer diaphragm material
Dimensions (not including mounting tabs)	404mm x 304mm x 75mm (15 <sup>13/16</sup> " x 11 <sup>15/16</sup> " x 3 <sup>1/16</sup> "
Product weight	2.9Kg (6lbs 6oz)
Fixing requirements	All fixings provided
Manufacturer limited warranty	10 years

#### Amina Technologies Limited

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## DSP settings\*

Freq.	125Hz	160Hz	200Hz	250Hz	400Hz	630Hz	800Hz	1.25kHz	4kHz	5kHz	6.3kHz	8kHz
Gain	0	-4dB	-4dB	-4dB	-3dB	-6dB	-6dB	-6dB	0	3dB	8dB	3dB

\*DSP settings are defined as a starting point - actual settings will highly depend on installation and positioning of the loudspeaker.

## Important Notes

Amina's EN54-24:2008 rated loudspeakers have been certified for use in voice evacuation systems. The EN54-24:2008 standard concerns only the loudspeaker aspect of fire evacuation systems. The wider EN54 standard encompasses regulations for all other components of fire evacuation systems and it is essential that the design, application and commissioning of voice alarm systems as a whole is overseen by a competent person.

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