

MG-10 / MG-20

ESOTERIC

Esoteric Loudspeaker Line



The Technology

Three way joint venture partners

ESOTERIC

NIPPON KINZOKU CO., LTD.

TANNOY
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OUTLINE

ESOTERIC

Exclusive Esoteric magnesium (Mg) diaphragm technology with proprietary chemical coating meets elegant British assembly.

The world's first all magnesium diaphragm two way loudspeaker system!

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 **NIPPON KINZOKU CO., LTD.**

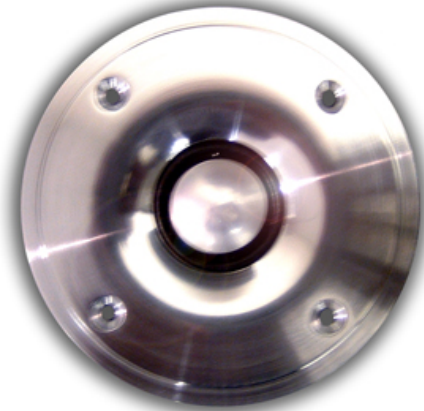
ESOTERIC

Mg alloy diaphragm technology

- Esoteric exclusive Mg technology, ceramic coating and corrugation
- World' first Mg diaphragm 2 way loudspeaker
- Exceptionally high resolution
- Crystal-clear transparency
- Free from carbon fiber, Kevlar, metallic and paper resonance typically associated with other driver materials

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KEY FEATURES

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British engineering, integration and production

- Designed by Esoteric acoustic engineering
- Exclusive protective magnesium coatings developed in Japan
- Acoustic engineering and cabinetry by TANNOY, Ltd. U.K.
- Final manufacturing and tuning in Scotland by TANNOY, LTD. U.K.

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What are the elements required for high performance diaphragms?

1. Low mass

High resolution / high sensitivity
Capability to reproduce extremely delicate notes

Magnesium (Mg) is the most “sonically neutral,”
and most lightweight industrial metal known!

2. Fast sonic propagation

Sharp focus
True to life dynamics

Mg, three times faster acoustic response rate
compared to paper cones!

What elements are required for high performance diaphragms?

3. High rigidity

Precise piston motion

Reduced distortion

Mg, the highest rigidity among industrial metals!

4. High internal dissipation

Better resonance control / reduced coloration

crystal-clear transparency

Mg, highest internal dissipation among industrial metals!

TECHNOLOGY - MG DIAPHRAGM



		Mg alloy	AL alloy	Titanium	Paper
1	Specific gravity (g/cm ³)	1.77	2.74	4.50	0.50
2	Sonic propagation (m/s)	4880	4890	4940	1650
3	Internal dissipation	0.004	0.002	0.002	0.04

- Low mass = high resolution and higher sensitivity!
- Three times faster than paper allowing a very fast acoustic response!
- Free from all metallic resonance and acoustic coloration known to exist in other metals, treated paper, carbon fiber and Kevlar

Esoteric acoustic engineering and exclusive Mg coating technology produced with NIPPON KINZOKU Tokyo

1. Extra-thin two layer coating to protect and seal the proprietary magnesium compound (Organic membrane + specialized ceramic coating)

- ✓ Better anti-resonance capability without loss in sensitivity
- ✓ Protection against rust, oxidation, volatility and other environmental influence

2. Corrugation technology

- ✓ Carefully designed resonance control technology
- ✓ Proprietary application

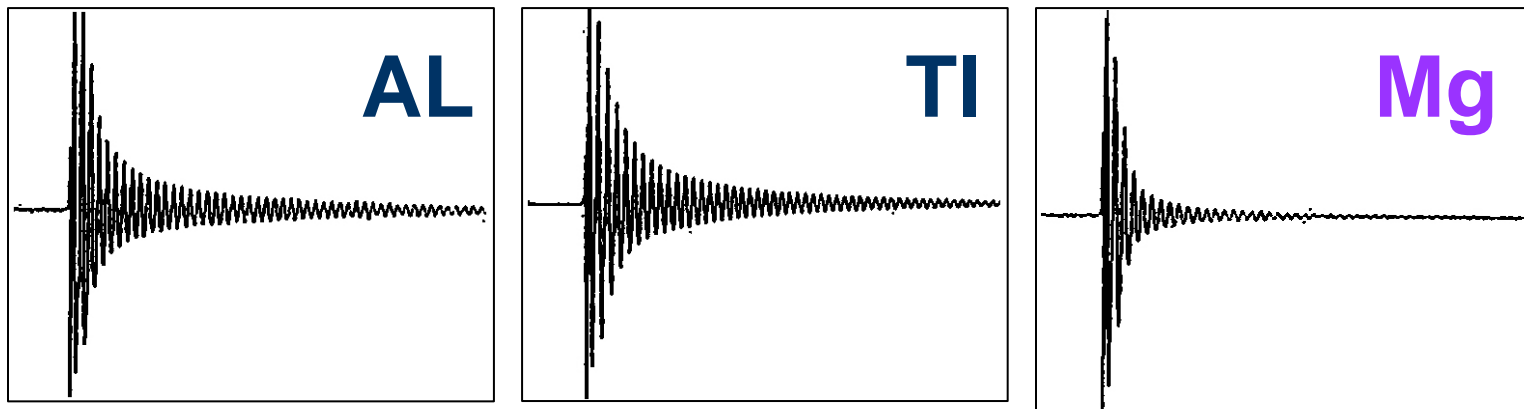
Goal: Maximize Mg performance through superior resonance control!



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Impulse response characteristics



Conventional metal diaphragms have a very fast response rate and slow decay. This clearly creates metallic coloration and adds resonance.

Esoteric's Mg cone designs have a very **fast decay** thanks to their higher internal dissipation and resonance control technology (Proprietary ceramic coating and corrugation). Furthermore, **Mg** is acoustically neutral and "color free."

Mg - Sonic character / basic advantages

- ✓ Higher resolution
- ✓ Ultra high sensitivity
- ✓ Exceptionally smooth response
- ✓ Crystal-clear transparency
- ✓ Sharp focus and precise imaging

Benefits:

- ✓ Delicate strings, lively percussion
- ✓ Natural vocalizations
- ✓ Lack of coloration – (acoustically neutral)!



THE REVIEWS

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- ***Stereophile / Aug. 2008***... “None of this technical precision was achieved by the speakers diluting the musical message. It doesn’t get much better than that.....a shoo-in for class A category..... recommended components.....”
- ***UltraAudio.com / June 2008*** ...“The Esoteric MG-20 has changed what I thought was possible from a dynamic driver...”
- ***SoundStage Networks / May 2008***...” The MG-10 possesses all of the qualities that you might expect from a mini-monitor -- speed, articulation, transparency, tonal accuracy, and incredible sound staging.”
- ***JazzTimes / Jan. 2008***... “the sound was very, very solid and evidenced extreme clarity in addition to the authoritative weight.”
- ***The Absolute Sound / Dec. 2007***... “The MG-20 is the most musically compelling box speaker I’ve heard to date – a perfect example of technology in the service of music.”
- ***Stereophile / Oct. 2007***... “Esoteric is celebrating its 20th anniversary this year. With products like these new Mg-series speakers, it looks as if they will be around at least another 20 years.”

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THE AWARDS (so far...)

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MG-20
The Absolute Sound 2008 Golden Ear Award
and 2008 Editor's Choice Award

MG-20
Stereophile "Class A"
Recommended Components 2008



MG-20 Stereo Sound Japan
2007 Grand Prix Award



MG-10
Innovations 2008 CEA Design and Engineering
Award Honoree (For New Technology)



MG-20
Swing Journal Magazine
2007 - 19th Jazz Component Award
First prize "The Best Loudspeaker"

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OTHER FEATURES

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Ultra high grade components

- ICW 'ClarityCap' film capacitor for HF network (UK made)
- Large and low loss laminated silicone steel core inductor
- Hard wired network / no PCB board
- van den Hul high purity, silver coating connecting wire
- Bi-wire terminal with "earth point" to minimize RF interference

Rigid enclosure construction

- Specially selected Birch enclosure (front baffle: T25mm)
- Non-parallel side panels prevent internal standing waves
- Solid American cherry side wood rails for rigid baffle joints
- Extensive cross bracing and heavy interior acoustic damping

Elegant finish

- Individually selected, American cherry wood veneer, oil rub

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The Esoteric loudspeaker line

An integration of completely new diaphragm materials and internal technologies, newly developed sound engineering applications and state of the art British assembly techniques!



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SPECIFICATIONS



MODEL	MG-10	MG-20
CABINET DIMENSIONS (H x W x D)	440 x 216 x 271 mm (17 1/3 x 8 1/2 x 10 11/16")	900 x 216 x 271 mm (35 7/16 x 8 1/2 x 10 11/16")
ENCLOSURE VOLUME	7.5 liter	21.5 liter
ENCLOSURE TYPE	Reflex	
ENCLOSURE WEIGHT	7.5 kg (16.5 lbs)	14 kg (30.9 lbs)
RECOMMENDED AMPLIFIER POWER	20 to 120 watt per channel	20 to 170 watt per channel
POWER RATING	75 watt RMS	90 watt RMS
	300 watt peak	360 watt peak
SENSITIVITY	87.5 dB for 2.83 volt at 1 meter, half space	89 dB for 2.83 volt at 1 meter, half space
NOMINAL IMPEDANCE	6 ohm	
MINIMUM IMPEDANCE	3.8 ohm	3.7 ohm
FREQUENCY RESPONSE (-6dB) Note: Below 40 Hz a sub is recommended	41 Hz – 44 kHz	38 Hz – 44 kHz
CROSSOVER FREQUENCY	1.9 kHz	
CROSSOVER TYPE	2nd order LF, 3rd order HF. Bi-Wired, Hard-Wired passive, low loss.	
DRIVER TYPE	165mm (6 1/2 ") magnesium cone LF	2 x 165mm (6 1/2 ") magnesium cone LF
	25mm (1 1/2 ") magnesium dome HF	
CABINET CONSTRUCTION	High density birch ply. Internally cross braced and heavily damped. American Cherry wood veneers	

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*Esoteric MG-10 and MG-20 Loudspeakers
Optimum Listening Positions*

Cross axis point

Optimum listening positions (1-3 feet behind the cross axis).

A light blue rounded rectangle containing the text 'Optimum listening positions (1-3 feet behind the cross axis).' Below the text are four musical notes: a green note, a red note, a yellow note, and a blue note, each with a shadow.

