



ELATE Limited Edition Series
USER GUIDE

"High-end drivers and component systems are the monikers Morel is known for. When sound quality is discussed, Morel is more than likely to be named and with good reason. Over the years, Morel has maintained a rock steady position amongst the upper echelon of sound quality drivers for both the car and home audio environments through continuous development and ingenuity."

Eric Fitzgerald, Car Audio & Electronics



All the Limited Edition components are tested and each pair is matched to ensure optimum performance.

Serial number- _____

Approved by- _____

ELATE Limited Edition

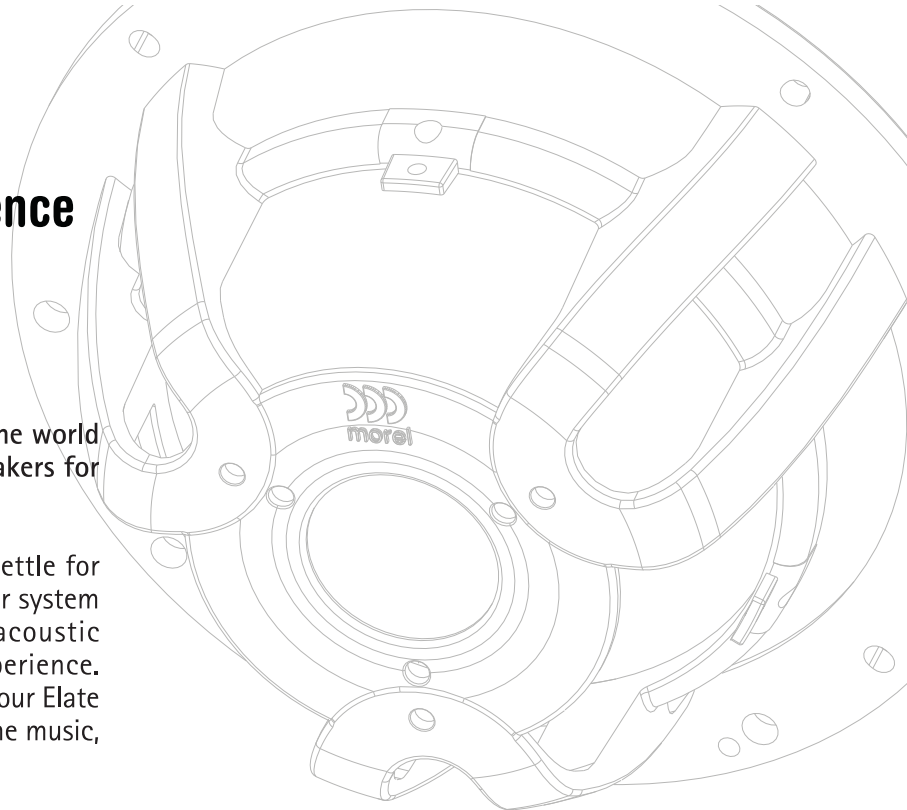
Morel's definitive sound experience

Dear Valued Customer,

Congratulations on being amongst just 500 others the world over who will enjoy these Elate Limited Edition speakers for years to come!

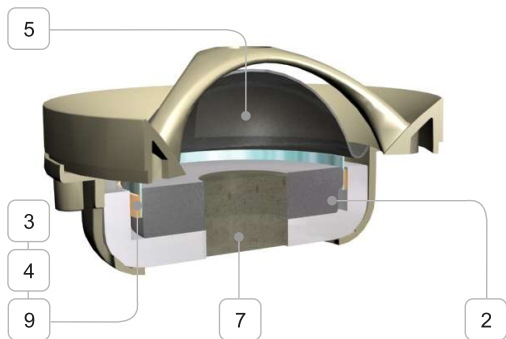
Designed and developed for those unique few who settle for nothing but the best, the Elate Limited Edition speaker system represents the epitome of Morel's proprietary acoustic technologies and delivers the definitive sound experience. Engineered to capture the magic of live performance, your Elate Limited Edition system will place you at the heart of the music, with all of the clarity and immediacy imaginable.

So go ahead and unleash your favorite music, to enjoy the extraordinarily natural and authentic sound reproduction of the Elate Limited Edition Series.

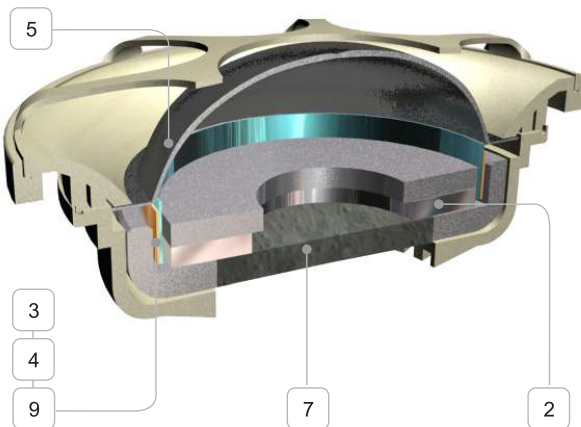


Elate Limited Edition Technological Features

MT-24LE Cut Tweeter Section



CDM-88LE Midrange Cut Section



1. Carbon Fiber composite sandwich cone

A newly developed cone made of two carbon fiber layers and a layer of Roahcell create an improved damping factor and minimize cone break up resulting in enhanced mid-bass frequency reproduction.

2. DNM™

A powerful and efficient Double Neodymium Motor design enables a wide dynamic range, transient response, accuracy and high power handling capability.

3. External Voice Coil (EVC)™

Morel's voice coil is three times larger than in conventional speakers with the same cone diameter enabling clear and precise sound reproduction even at higher sound levels. The large cone provides better support for the membrane, thus, enabling the use of shallower cone construction for improved dispersion and the reduction of cone break up during speaker operation.





4. Hexatech™ aluminum voice coil

All of the Elate LE sound drivers utilize Morel's unique Hexatech™ aluminum, honeycomb structured voice coil that reduces air gaps and increases efficiency by up to 20%. The lightweight structure allows for the quick transient response necessary for accurate music reproduction with incredible detail.


5. Acuflex™ coating

The tweeter and midrange cones are coated with Acuflex, a specially engineered material that ensures effective damping, and reduces distortion levels and unwanted resonance, to provide audiophile-grade and warm sound characteristics.

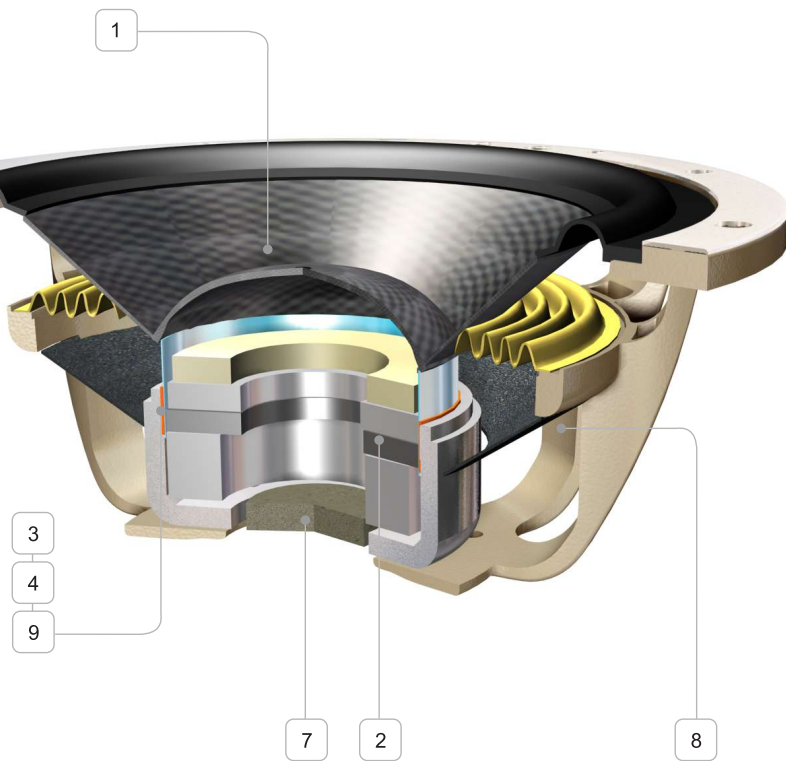
6.  **Hybrid™ motor drive magnet system**
 The Elate LE woofer utilizes a hybrid motor magnet – which combines neodymium and ferrite magnets to achieve up to four times more power than conventional magnets of the same size. With Morel's hybrid magnet design, more amplifying power can be converted into sonic energy, for flawless performance even in a small driver.

7.  **C.A.R. (Controlled Acoustic Resistance) Filter™**
 Specially designed for car audio applications, where drive units are often installed within free-air environments, the filter mimics the effect of a cabinet to restrain air flow within the drive unit and control cone movement. The result is improved acoustical loading and power handling.

8. **Uniflow™ chassis**
 The Uniflow aerodynamic chassis allows both air and sound waves to flow uniformly and smoothly, eliminating interference with the woofer's moving parts. The geometric design enables the use of a low-profile spider that provides greater support and stability to the voice coil and cone under the most demanding operating conditions.

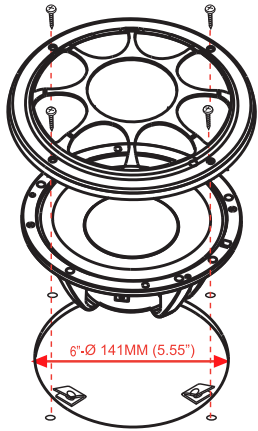
9.  **Shielded products**
 Morel products are magnetically shielded to eliminate interference with audio system wiring and the vehicle's electronic circuits.

Elate SW 6LE Woofer Cut Section



Elate Limited Edition 2-way and 3-way system installation

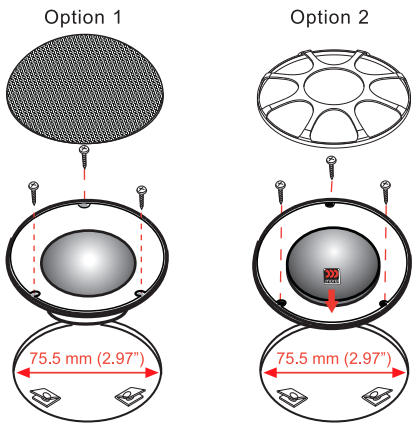
Elate SW 6LE mounting



Elate tweeter MT-24LE mounting options

	Flush	Surface 1	Surface 2
	<p>1</p> <p>2</p>	<p>1</p> <p>2</p>	<p>1</p>
	<p>3</p> <p>4</p>	<p>3</p> <p>4</p>	<p>2</p>

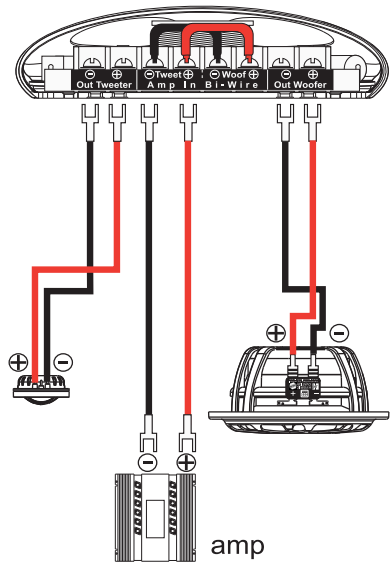
Elate midrange CDM-88LE mounting



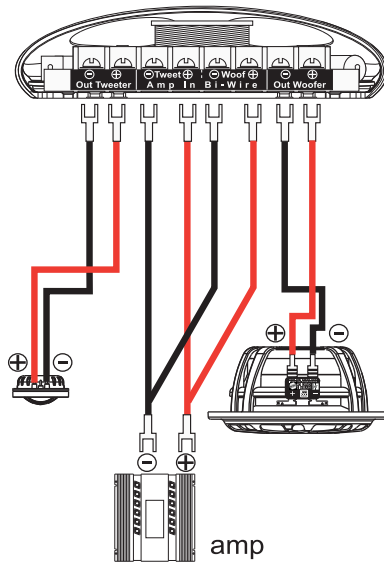
<p>3</p> <p>4</p>	<p>3</p> <p>4</p>	<p>2</p>
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Elate Accuset MX-22.2LE crossover wiring options

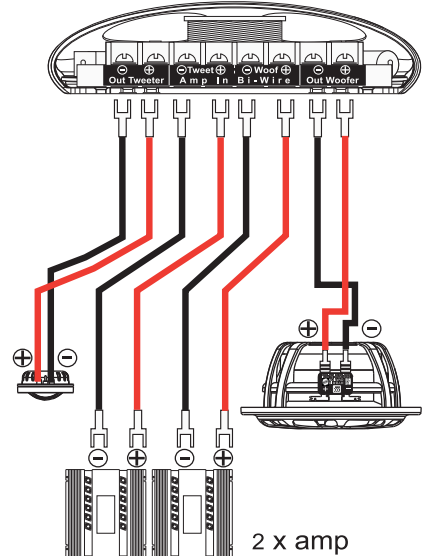
1 Standard Wire connection/ With bridged jumpers



2 Bi Wire connection/ No bridged jumpers

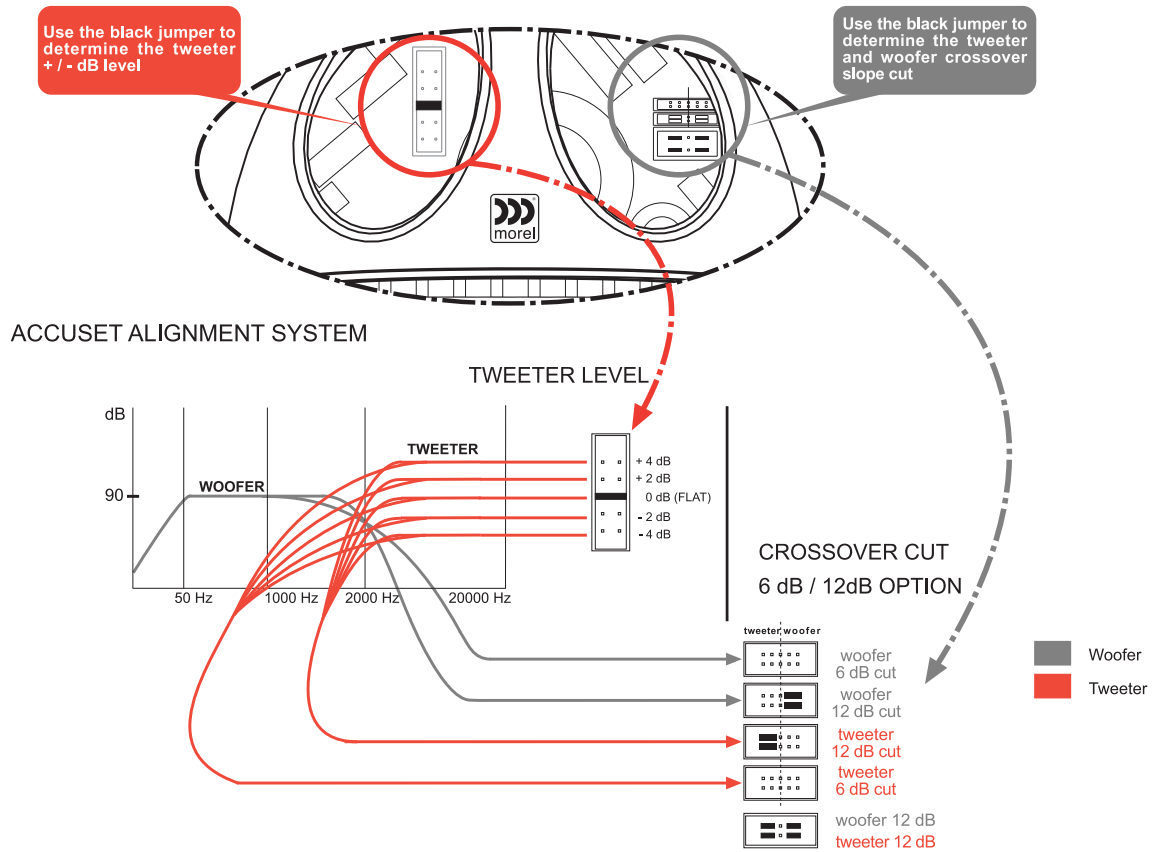


3 Bi Amp connection/ No bridged jumpers



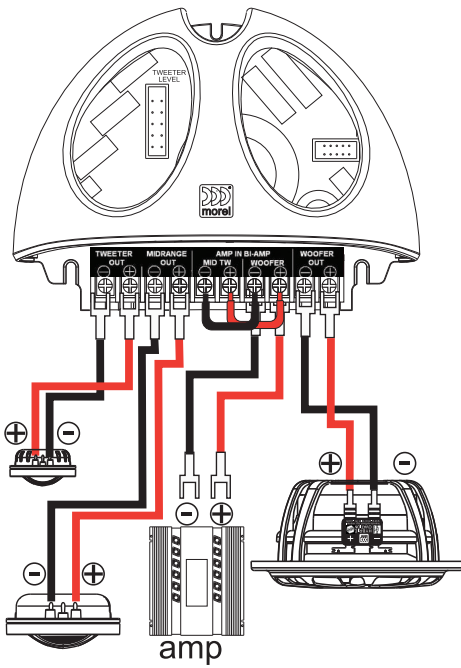
Adjusting the Accuset MX-22.2LE crossover

The tuning process of the Accuset MX-22.2LE can be simplified with the Accuset crossover alignment system, which enables easy and fast adjustment of the crossover from any location, achieving optimal soundstage and performance.

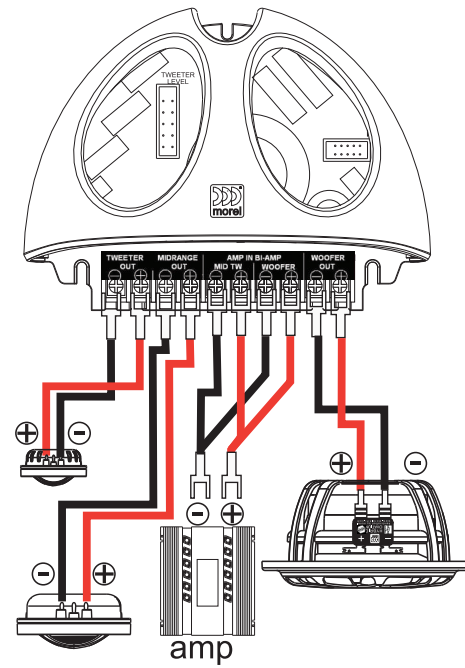


Elate Accuset MX-33.3LE crossover wiring options

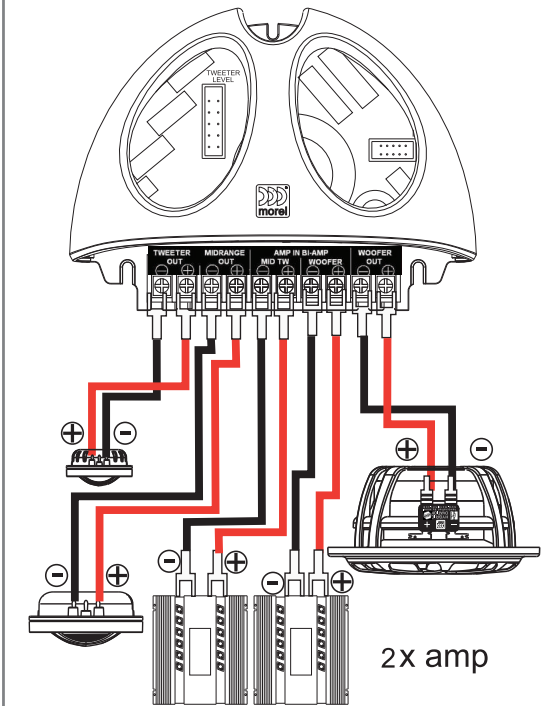
1 Standard Wire connection/ With bridged jumpers



2 Bi Wire connection/ No bridged jumpers

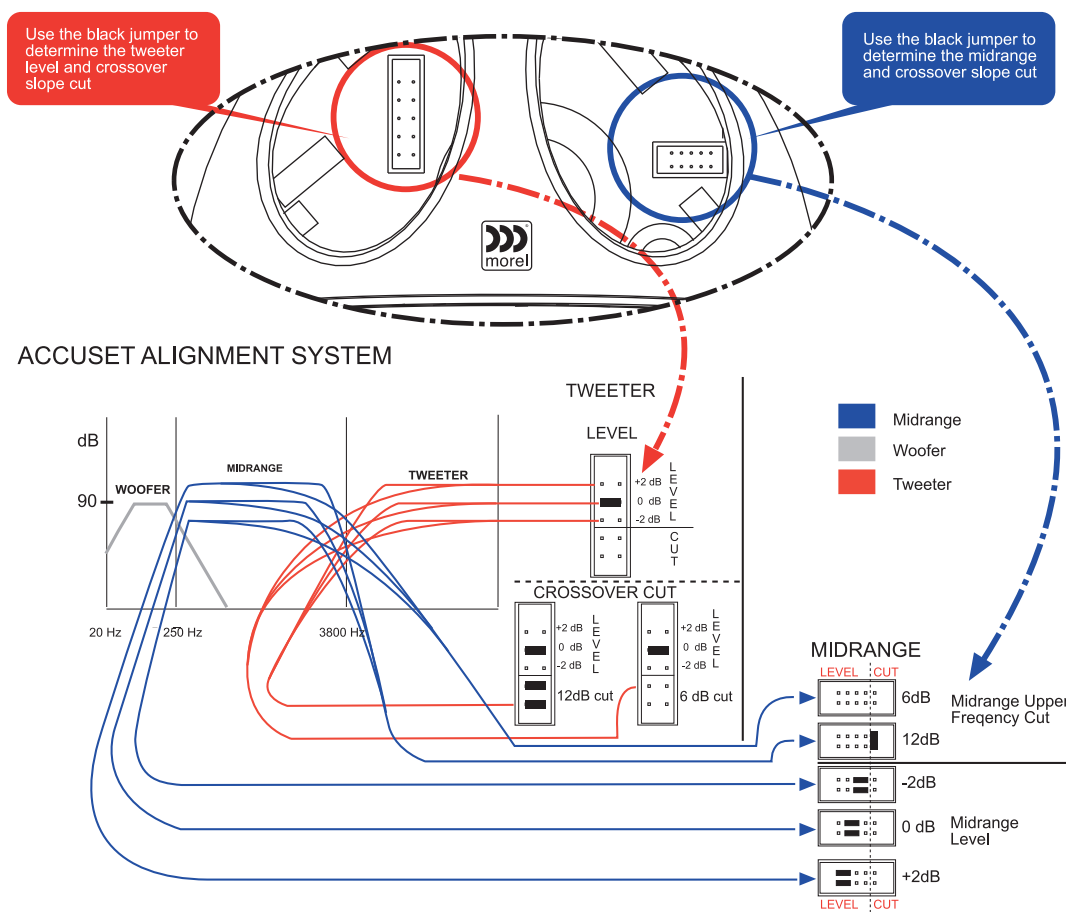


3 Bi Amp connection/ No bridged jumpers



Adjusting the Accuset MX-33.3LE crossover

The tuning process of the Accuset MX-33.3LE can be simplified with the Accuset crossover alignment system, which enables easy and fast adjustment of the crossover from any location, achieving optimal soundstage and performance.



WOOFER

	Elate SW 6LE
Nominal Impedance	4.00 ohm
Power Handling	200W
Max. Transient Power Handling	1000W
Sensitivity (2.83V/1M)	88dB
Frequency Response	25-4000Hz
FS	50Hz
Voice Coil Diameter	75.00mm (3.00")
Voice Coil Height	16.00mm (0.62")
Voice Coil Type/ Former	Aluminum
Voice Coil Wire	Hexatech aluminum
DC Resistance	4.10 ohm
Voice Coil Inductance @1kHz	0.44MH
Magnet System	Hybrid rear vented
HE-Magnetic Gap Height	6.00mm (0.25")
B-Flux Density	0.80T
BL Product/BXL	7.07
Max. Linear Excursion/Xmax	10.0mm (±5.0mm)
Suspension Compliance CMS	0.560
Mechanical Q Factor QES	0.44
Total Q Factor Q/T	0.37
QMS	2.21
Mechanical Resistance RMS	2.44kgS ¹
Moving Mass MMS	16.5gr (0.58oz)
Equivalent Cas Air Load VAS	11 L (0.39ft ³)
Effective Piston Area SD	119cm ² (18.45in ²)
Cone Type	One-piece formed
Cone Material	Carbon RohaceII Sandwich
Unit Diameter	165.00mm (6.50")
Mounting Depth	61.00mm (2.40")
Mounting Cutout	141.00mm (5.55")
Net Weight	1.18kg (2.60lb)

TWEETERS & MIDRANGE

	MT-24LE	CDM-88LE
Nominal Impedance	6.00 ohm	4.00 ohm
Power Handling	130W	100W
Max. Transient Power Handling	350W	300W
Sensitivity (2.83V/1M)	90dB	89dB
Frequency Response	1400-25000Hz	450-7000Hz
FS	700Hz	280Hz
Voice Coil Diameter	28.00mm (1.10")	54.00mm (2.10")
Voice Coil Former	Aluminum	Aluminum
Voice Coil Wire	Hexatech aluminum	Hexatech aluminum
DC Resistance	5.20 ohm	3.50 ohm
Magnet System	Double magnet neodymium-H type	Neodymium rear vented
Dome Type	Acuflex soft dome	Acuflex soft dome
Dome Material	Silk	Silk
Unit Diameter	45.00mm (1.80")	88.00mm (3.50")
Mounting Depth	20.00mm (0.80")	21.00mm (0.83")
Mounting Cutout	50.00mm (2.00")	75.50mm (2.97")
Net Weight	0.07kg (0.15lb)	0.25kg (0.55lb)

CROSSOVER

	Accuset MX-33.3LE	Accuset MX-22.2LE
Nominal Impedance	4.00 ohm	4.00 ohm
Power Handling	250W	280W
Crossover Point	Woofer: 380Hz/12dB Midrange: low 300dB 6dB, High 3800 Hz 6/12dB (Variable) Tweeter: 3800Hz 6/12db (Variable)	1800Hz
Crossover Controls	Midrange upper frequency slope cut: 6/12dB Midrange level: -2dB, 0dB, +2dB Tweeter frequency slope cut: 6/12dB/octave Tweeter level: -2dB, 0dB, +2dB	Frequency slope cut: 6/12 dB Tweeter level: ±4dB (2dB steps)
Wiring Options	Standard, bi-amp, bi-wire	Standard, bi-amp, bi-wire
Housing Material	Die-cast aluminum	Die-cast aluminum
Terminal Type	Fully insulated gold plated screw taps	Large screws gold plated
Net Weight	1.20kg (2.65lb)	1.10kg (2.40lb)

ENCLOSURE SPECIFICATIONS

	SEALED	PORTED
Volume	4 liter	6.5 liter
F3	-3db 75 Hz w/50% filling*	-3db 60 Hz w/25% filling*
Port Dia.		1.5"
Port length		11 cm

*You can use any acoustic damping material

Wishing you many years of sound enjoyment!



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