

more

high fidelity range



# MDT40

## Compact Soft-Dome Tweeter

The MDT40 is a panel-mounting high quality tweeter of small dimensions. It features an ultra-compact, light-weight, vented Neodymium magnet system, coupled to a large rear air chamber for a low resonance frequency of only 750Hz. The diminutive face-plate size of only 54mm (2.125") enables mounting very close to the woofer for improved sound integration.

The same well-proven dome and voice coil assembly is used as in the MDT30, and is replaceable. The 28mm (1.125") hand-treated cloth dome, Hexatech aluminium wire, aluminium former and braided lead-out wires, help to provide a very linear and wide frequency response – both on and off axis – with low distortion, high power handling and lack of sound pressure level compression.

The superior power handling and low resonance frequency of the MDT40 enables the tweeter to safely be used with 6dB per octave filters having a relatively low crossover frequency.

MDT40 delivers a very fine standard of performance quite regardless of size. Indeed, certain improvements on the ceramic-magnet MDT30 have been incorporated.

MDT40 has a deep rear chamber with an inverted conical end profile for strength and to minimise internal reflections; it is filled with dense natural wool felt for optimum damping and reflection absorption. The efficient enclosed magnetic circuit virtually eliminates stray magnetic fields, allowing use close to colour TV screens.

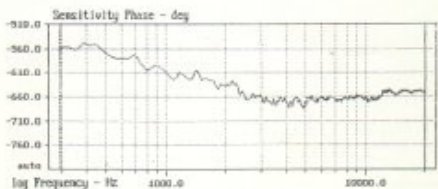
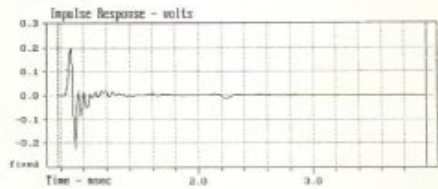
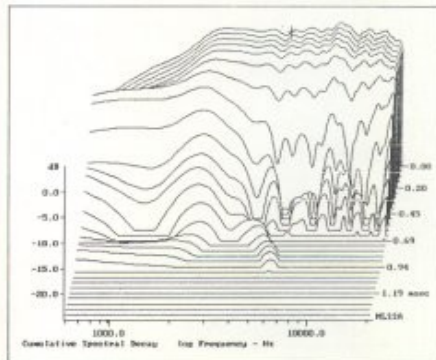
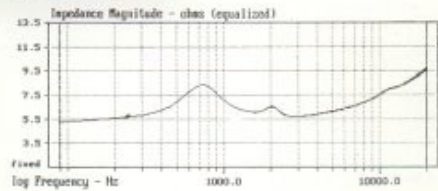
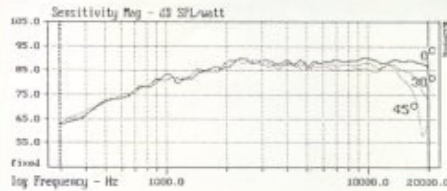
### Specification

Overall Dimensions	54mm(2.125") x 58mm(2.28")
Face Dimensions	54mm x 54mm x 3mm(2.125" x 2.125" x 0.12")
Nominal Power Handling (Din)	120W
Transient Power - 10ms	1000W
Voice Coil Diameter	28mm (1.125")
Voice Coil Type/Former	Hexatech Aluminium
Frequency Response	2200-20000 Hz
FS - Resonant Frequency	750 Hz ± 10%
Sensitivity 1W/1m	89dB
Z - Nominal Impedance	8 ohms
RE - DC Resistance	5.2 ohms
Harmonic Distortion for 96dB SPL	< 0.8%
Intermodulation Distortion for 96dB SPL	< 0.22%
LBM - Voice Coil Inductance @ 1kHz	0.05 mH
Magnetic Gap Width	0.75mm (0.029")
HE - Magnetic Gap Height	2.5mm (0.098")
Voice Coil Height	2.7mm (0.106")
BL Product (BXL)	2.2
Qms - Mechanical Q Factor	0.89
Qes - Electrical Q Factor	2.80
Q/T - Total Q Factor	0.68
Vas - Equivalent Cas Air Load	0.01 litres
MMS - Moving Mass	0.46 gm
SD - Effective Cone/Dome Area	7 cm <sup>2</sup>
Cone/Dome Material	Hand Treated Fabric
Nett Weight	0.90 kg

Specifications given are as after at least 45 minutes of high power, low frequency running, or 24 hours normal power operation.



Photo: Actual Size



Morel operate a policy of continuous product design improvement, consequently specifications are subject to alteration without prior notice.