

10 IT 500 MB

SWETON®



10 IT 500 MB – Precision Mid-Bass for Powerful Sound Reproduction

Designed for demanding mid-bass applications, the 10 IT 500 MB is a 10-inch transducer engineered with a high-efficiency motor structure and optimized suspension to deliver clean, punchy mid-bass with exceptional clarity.

With a sensitivity of 97 dB, the driver ensures efficient power conversion, making it ideal for live sound, floor monitors, and outdoor PA systems. The BI factor of 18.52 N/A guarantees precise cone control, resulting in tight and accurate mid-bass even under high-power applications.

Crafted using advanced FLSI analysis on the Klippel Analyzer System, this driver ensures high linearity, and reliability across various use cases.

Whether you're designing a two-way PA system or a custom array, the 10 IT 500 MB offers clarity, durability, and performance that stands above the rest.

Recommended HF Driver Pairing

Parameter	Value
Enclosure Type	Vented
Volume (Vb)	25–30 litres
Tuning Frequency (Fb)	75 Hz
Port Dimensions	Ø 3.5" (89 mm) 120 mm length

For punchier bass and optimized SPL, use flared port to minimize air turbulence.

Recommended HF Driver Pairing for 10 IT 500 MB

Parameter	Recommendation
Power Rating	80–100W AES
Sensitivity	105–110 dB SPL
Diaphragm Type	Titanium preferred (for high clarity & durability)
Exit Size	1" or 1.4" compression driver

CROSSOVER RECOMMENDATIONS

Crossover Type	Frequency	Slope
High Pass (HPF)	80 Hz	24 dB/oct (for vented)
Low Pass (LPF)	3.2–3.5 kHz	12–18 dB/oct
HF Driver HPF	1.5–1.6 kHz	18–24 dB/oct

✓ WHY TO CHOOSE 10 IT 500 MB?

- ✓ Exceptional Sensitivity (97 dB) for loud and clear output
- ✓ Strong motor (BI = 18.52 N/A) for tight bass response
- ✓ Precision engineered via Klippel – tested for low distortion and high linearity
- ✓ Compact box design – easy to implement in portable or installed systems
- ✓ Wide compatibility with industry-standard HF drivers

SPECIFICATIONS & PARAMETERS

Specifications

Nominal Diameter	261 mm
Nominal Impedance	8 Ω
Nominal Power Handling (AES)	500 W
Program Power	1000 W
Sensitivity (1W/1m)	97 dB
Frequency Range	87-5000 Hz
Magnet Material	Ferrite
Voice Coil Diameter	76.2 mm (3 in)
Winding Material	CCAW
Former Material	Glass Fibre
Winding Type	In/Out

Mounting Info

Overall Diameter	261 mm
Bolt Circle Diameter	248 mm
Baffle Cutout Diameter	234 mm
Depth	110 mm
Flange and Gasket Thickness	14 mm
Gross Weight	8.80 Kgs

Parameters

Resonant Frequency	Fs	87 Hz
DC Resistance	Re	6.8 Ω
Electrical Q	Qes	0.38
Mechanical Q	Qms	14.96
Total Q	Qts	0.37
Compliance Equivalent Volume	Vas	18.74 Ltrs
Peak Diaphragm Displacement Volume	Vd	0.05 Ltrs
Effective Surface Area of Cone	Sd	363.1 cm ²
Reference Efficiency	η_0	3.17%
Moving Mass including air load	Mms	34.2 gms
Motor Strength	Bl	18.52 T-m
Voice Coil Inductance	Le	0.35 mH
Efficiency Bandwidth Product	EBP	228 Hz
Voice Coil Overhang	Xmax	± 1.50 mm

Recone Kit

Recone Kit Number	REC10IT500MB
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Z(f,x=0) Impedance

