

12 PT 200 MB

SWETON®



12 PT 200 MB is a 12-inch mid-bass transducer crafted for punchy, clean bass and midrange with high power handling and minimal distortion. Leveraging Klippel R&D analysis and an optimized motor design, this driver features:

- F_s of 39.0 Hz for extended low-end
- Bl of 11.97 N/A and (Bl^2/Re) of 23.07 Ns/m for motor strength and efficiency
- Q_{ts} of 0.47 offering a balance between tight bass and usable bandwidth
- Large S_d (522.80 cm^2) for high output and sound pressure
- High mechanical Q ($Q_{ms} = 14.01$) indicating minimal mechanical losses

It performs best in mid-bass to upper-bass applications, ideal for 2-way PA tops, mid enclosures, or club and DJ monitors.

✓ RECOMMENDED ENCLOSURE (Vented)

Parameter	Specification
Type	Vented / Reflex enclosure
Internal Volume	45–55 litres
Port Tuning (Fb)	~55 Hz
Port Size (example)	1 port, $\varnothing 100$ mm x 160 mm L

✓ RECOMMENDED HF DRIVER PAIRING

Parameter	Recommended Value
Power Rating	80–120W AES
Sensitivity	107–110 dB SPL
Exit Size	1.4 inch compression driver
Diaphragm Type	Titanium or polymer diaphragm

✓ CROSSOVER RECOMMENDATION

Driver	Type	Frequency	Slope
12 PT 200 MB	LPF	3.2–3.5 kHz	12 or 18 dB/oct
HF Driver	HPF	1.6–2.0 kHz	12 or 18 dB/oct

☐ Overlap ensures smoother transition, but use bandpass filtering to avoid harshness. Aim for a crossover point near 2.2–2.5 kHz where both units perform optimally.

✓ APPLICATIONS

- Professional PA tops and mid-bass cabs
- 2-way enclosures for DJs, roadshows
- High SPL outdoor systems
- Mid-frequency reinforcement in line arrays

✓ WHY USE 12 PT 200 MB?

- Powerful mid-bass with clean tonality
- High excursion X_{max} (4.8mm) for dynamic punch
- Wide usable bandwidth (39 Hz–4.5 kHz)
- Tested and tuned with Klippel Analyzer
- Rugged yet lightweight for transportable enclosures

SPECIFICATIONS & PARAMETERS

Specifications

Nominal Diameter	321 mm
Nominal Impedance	8 Ω
Nominal Power Handling (AES)	200 W
Program Power	400 W
Sensitivity (1W/1m)	94 dB
Frequency Range	39-4500 Hz
Magnet Material	Ferrite
Voice Coil Diameter	51.2 mm (2 in)
Winding Material	CCAW
Former Material	KAPTON
Winding Type	Outside

Mounting Info

Overall Diameter	321 mm
Bolt Circle Diameter	300 mm
Baffle Cutout Diameter	287 mm
Depth	128 mm
Flange and Gasket Thickness	8 mm
Gross Weight	5.24 Kgs

Parameters

Resonant Frequency	Fs	39 Hz
DC Resistance	Re	6.2 Ω
Electrical Q	Qes	0.49
Mechanical Q	Qms	14.01
Total Q	Qts	0.47
Compliance Equivalent Volume	Vas	137.36 Ltrs
Peak Diaphragm Displacement Volume	Vd	0.17 Ltrs
Effective Surface Area of Cone	Sd	522.8 cm ²
Reference Efficiency	η_0	1.63%
Moving Mass including air load	Mms	45.90 gms
Motor Strength	Bl	11.97 T-m
Voice Coil Inductance	Le	0.26 mH
Efficiency Bandwidth Product	EBP	80 Hz
Voice Coil Overhang	Xmax	± 4.80 mm

Recone Kit

Recone Kit Number	REC12PT200MB
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$Z(f, x=0)$ Impedance

