

15 PT 1200 MB

SWETON®



Introducing the **15 PT 1200 MB**, a powerhouse mid-bass transducer crafted for the most demanding professional audio applications. Built with a robust 4-inch voice coil and designed to handle 1200 watts AES power, this driver is engineered to deliver thunderous low-end punch and articulate mid-bass response with extreme reliability.

At its heart lies a highly efficient motor structure featuring a BL product of 26.89 N/A and a tightly controlled Qts of 0.34, offering outstanding control and transient response. With a low Fs of 40 Hz, it reaches deep into the low-frequency spectrum, while maintaining a flat and natural midrange – ideal for PA systems where clarity and punch must coexist.

The large 876 cm² cone area, combined with a lightweight yet stiff suspension system, results in exceptional sensitivity (~95 dB SPL) and dynamic response. Thanks to extensive testing on the Klippel Analyzer System, the speaker exhibits excellent linearity and low distortion even under high excursion, with a recommended Xmax of ±7 mm.

Optimized for vented enclosures of 120–140 litres, the 15 PT 1200 MB performs best when paired with a compression HF driver crossed over at 2.2–2.5 kHz, making it an ideal choice for 2-way full-range enclosures, stage monitors, DJ setups, and mobile roadshows.

Recommended Enclosure

Type	Volume (Vb)	Port (Diameter × Length)
Vented Box	120–140 L	4" dia × 150 mm

Tune to around 45–50 Hz for extended low-end with punchy mid-bass.

Crossover Recommendations

Driver	Filter Type	Frequency	Slope
15 PT 1200 MB	Low Pass	2.2–2.5 kHz	18 dB/oct
HF Driver	High Pass	1.8–2.0 kHz	18 dB/oct

✎ Crossover gap of 200–300 Hz prevents phase conflict and ensures natural vocal clarity.

Recommended HF Driver Pairing

Parameter	Recommendation
Power Rating	80–120W AES
Sensitivity	105–110 dB SPL
Diaphragm Type	Titanium/Polymer
Exit Size	1" or 1.4" Compression Driver
Horn	60° × 40° dispersion horn
Recommendation	

Applications:

- Premium 2-way professional PA systems
- Roadshows and DJ setups
- Touring and rental rigs
- High-output vocal reinforcement cabinets
- Open-air events and festival setups

Why Choose 15 PT 1200 MB?

- **Extreme Power Handling:** 1200W AES with 4" voice coil ensures consistent performance at high SPL.
- **Deep Punchy Response:** 40 Hz Fs and optimized compliance for impactful low-end.
- **Precision Engineering:** Built using Klippel's FLSI system ensures accurate motor symmetry and distortion control
- **Rigorous Testing:** All units verified with CLIO & Klippel Analyzer for quality assurance.

SPECIFICATIONS & PARAMETERS

Specifications

Nominal Diameter	394 mm
Nominal Impedance	8 Ω
Nominal Power Handling (AES)	1200 W
Program Power	2400 W
Sensitivity (1W/1m)	95 dB
Frequency Range	40-2800 Hz
Magnet Material	Ferrite
Voice Coil Diameter	99.3 mm (4 in)
Winding Material	COPPER
Former Material	GLASS FIBRE
Winding Type	In/Out

Mounting Info

Overall Diameter	394 mm
Bolt Circle Diameter	375 mm
Baffle Cutout Diameter	352 mm
Depth	182 mm
Flange and Gasket Thickness	13 mm
Gross Weight	13.90 Kgs

Parameters

Resonant Frequency	Fs	40 Hz
DC Resistance	Re	6.7 Ω
Electrical Q	Qes	0.34
Mechanical Q	Qms	17.13
Total Q	Qts	0.34
Compliance Equivalent Volume	Vas	115.97 Ltrs
Peak Diaphragm Displacement Volume	Vd	0.41 Ltrs
Effective Surface Area of Cone	Sd	876.16 cm ²
Reference Efficiency	η_0	2.07%
Moving Mass including air load	Mms	147.50 gms
Motor Strength	Bl	26.89 T-m
Voice Coil Inductance	Le	1.18 mH
Efficiency Bandwidth Product	EBP	118 Hz
Voice Coil Overhang	Xmax	± 7 mm

Recone Kit

Recone Kit Number	REC15PT1200MB
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Z(f,x=0) Impedance

