

# 12 PT 500 MB GOLD

**SWETON®**



## 12 PT 500 MB GOLD – Premium Mid Bass Driver for Professionals

Designed using the advanced Klippel Analyzer System and tested on CLIO 12.5, the 12 PT 500 MB GOLD is engineered for pristine mid-bass reproduction in professional PA and line array systems. Featuring a massive 22.42 N/A BL factor, ultra-low Qts of 0.23, and high sensitivity of 98 dB, it offers exceptional transient response and output efficiency.

With an Xmax of 4.72 mm, this driver can handle dynamic passages with ease while maintaining low distortion thanks to symmetrical BI(x) and stiffness curves. Built on a sturdy chassis with a 530.93 CM<sup>2</sup> cone area and optimized suspension, it delivers tight, punchy mids and clean upper bass.

Whether you're installing it in line arrays, monitor wedges, or stage cabinets, the 12 PT 500 MB GOLD is your go-to choice for clarity, punch, and power.

## Recommended Enclosure

Type	Volume (Net)	Tuning Frequency	Port Specs
Vented (Bass Reflex)	55 – 65 litres	65 Hz	Dual 4" dia x 6" length ports
Sealed	40 – 50 litres	–	For tighter, punchier response

## Recommended HF Driver Pairing:

Parameter	Recommendation
Power Rating	80–100W AES
Sensitivity	106–110 dB SPL
Diaphragm Type	Titanium preferred
Exit Size	1" or 1.4" compression driver

## Recommended Crossover Points:

Driver	Type	Crossover Range	Slope
12 PT 500 MB GOLD	LPF	3.2 kHz – 3.5 kHz	18 dB/oct (LR)
HF Driver	HPF	1.6 kHz – 1.8 kHz	18 dB/oct (LR)

⊙ There will be an overlap, but this is intentional for better phase summation and smoother transition. In PA systems, an intentional 0.5–1 octave overlap ensures proper coupling and prevents drop in vocal presence around 2 kHz–3 kHz.

## Ideal Applications

- Line Array Mid Section
- High-End 2-way PA Cabinets
- Vocal Monitors and Wedges
- Stage Side Fill Speakers
- Auditorium / Temple Installations
- Compact Bass Guitar Cabinets

## WHY Choose 12 PT 500 MB GOLD

- High Sensitivity (98 dB SPL) – Loud and clear even with modest power.
- Tight, Clean Mid Bass – Flat response from 100 Hz to 3.5 kHz.
- Advanced Testing – Verified by Klippel and CLIO 12.5 for pro-grade consistency.
- Robust BL and Low Qts – Ideal for compact vented enclosures with deep punch.
- High Xmax (±4.72 mm) – Delivers dynamic range and clear output under load.

## SPECIFICATIONS & PARAMETERS

### Specifications

Nominal Diameter	314 mm
Nominal Impedance	8 $\Omega$
Nominal Power Handling (AES)	500 W
Program Power	1000 W
Sensitivity (1W/1m)	98 dB
Frequency Range	55-4500 Hz
Magnet Material	Ferrite
Voice Coil Diameter	76.2 mm ( 3 in)
Winding Material	COPPER
Former Material	GLASS FIBRE
Winding Type	In/Out

### Mounting Info

Overall Diameter	314 mm
Bolt Circle Diameter	296 mm
Baffle Cutout Diameter	282 mm
Depth	147 mm
Flange and Gasket Thickness	15 mm
Gross Weight	9.2 Kgs

### Parameters

Resonant Frequency	Fs	53 Hz
DC Resistance	Re	5.7 $\Omega$
Electrical Q	Qes	0.24
Mechanical Q	Qms	20.03
Total Q	Qts	0.23
Compliance Equivalent Volume	Vas	57 Ltrs
Peak Diaphragm Displacement Volume	Vd	0.16 Ltrs
Effective Surface Area of Cone	Sd	530.93 cm <sup>2</sup>
Reference Efficiency	$\eta_0$	3.48%
Moving Mass including air load	Mms	62.30 gms
Motor Strength	Bl	22.42 T-m
Voice Coil Inductance	Le	0.40 mH
Efficiency Bandwith Product	EBP	221 Hz
Voice Coil Overhang	Xmax	$\pm 4.72$ mm

### Recone Kit

Recone Kit Number	REC12PT500MBG
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$Z(f, x=0)$  Impedance

