

18 KL 1850 SUB

SWETON®



Introducing the **18 KL 1850 SUB**, the flagship subwoofer of our newly launched KL SERIES, designed to deliver high power handling in a cost-effective and compact format. Engineered with a 5-inch voice coil, this transducer strikes the perfect balance between thermal capacity and optimized coil size, enabling it to handle a massive 1800 watts AES power with consistent performance. Built using high motor strength with a Bl^2/Re value of 164.52, the 18 KL 1850 SUB produces powerful, clean bass with exceptional efficiency. With an X-max of 11.60 mm (IEC standard) it ensures deep, distortion-free low frequencies even under demanding conditions. The subwoofer has passed all major large signal tests using the Klippel Analyzer System, including linearity, thermal, and mechanical robustness, proving its reliability for real-world high-output use. It's the ultimate choice for customers seeking high power, high value, and high performance, all in one robust subwoofer.

Recommended Enclosure Designs:

Type	Volume (Net)	Porting / Design	Tuning Frequency
Vented/ Reflex	140–160 litres	Ø150 mm 200 mm (single or dual port)	~40 Hz
4th Order Bandpass	Front: 55–65 L Rear: 80–90 L	Ported front chamber, sealed rear	38–45 Hz
Horn-Loaded	YES, feasible	Use 180–200 L with folded horn path	35–40 Hz tuning

Design Tip: With Qts at 0.48 and Vas of 82.73L (small signal), this driver balances well between compact vented and aggressive bandpass/horn designs. For maximum SPL, use in 4th-order bandpass or horn-loaded enclosures.

Crossover Recommendations:

Filter Type	Crossover Point	Slope
Low Pass (LPF)	100–120 Hz	24 dB/oct
High Pass (HPF)	30–35 Hz (Butterworth)	18–24 dB/oct

Use 24 dB/oct for tighter system integration and phase control with mid-high components.

Applications:

- Touring-grade subwoofer arrays
- Live concert rigs
- DJ systems for festivals and large crowds
- High-powered processions and outdoor events
- Bandpass cabinets for mobile sound systems
- Fixed installations in clubs or auditoriums

Why Choose 18 KL 1850 SUB?

- Higher Output with Smaller Coil – Our 5-inch coil design optimizes cooling without bulky cost and weight.
- FLSI Certified Durability – Passed all linear, nonlinear, thermal, and enlargement tests on Klippel.
- Focused Performance Range – Deep sub response meets punchy kick—ideal for Indian music demands.
- Flexible Box Compatibility – Supports reflex, bandpass, and horn designs for custom rig builds.
- Cost-Efficient Performance – Ideal for builders who demand quality without inflated pricing.

SPECIFICATIONS & PARAMETERS

Specifications

Nominal Diameter	470 mm
Nominal Impedance	8 Ω
Nominal Power Handling (AES)	1800 W
Program Power	3600 W
Sensitivity (1W/1m)	95 dB
Frequency Range	45-1500 Hz
Magnet Material	Ferrite
Voice Coil Diameter	126 mm (5.0 in)
Winding Material	COPPER
Former Material	GLASS FIBRE
Winding Type	In/Out

Mounting Info

Overall Diameter	470 mm
Bolt Circle Diameter	445 mm
Baffle Cutout Diameter	420 mm
Depth	211 mm
Flange and Gasket Thickness	22 mm
Gross Weight	25.30 Kgs

Parameters

Resonant Frequency	Fs	49 Hz
DC Resistance	Re	6.19 Ω
Electrical Q	Qes	0.49
Mechanical Q	Qms	19.47
Total Q	Qts	0.48
Compliance Equivalent Volume	Vas	82.73 Ltrs
Peak Diaphragm Displacement Volume	Vd	1.41 Ltrs
Effective Surface Area of Cone	Sd	1213.04 cm ²
Reference Efficiency	η_0	1.89%
Moving Mass including air load	Mms	263.70 gms
Motor Strength	Bl	31.93 T-m
Voice Coil Inductance	Le	1.24 mH
Efficiency Bandwidth Product	EBP	100 Hz
Voice Coil Overhang	Xmax	± 11.60 mm

Recone Kit

Recone Kit Number	REC18KL1850SUB
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Z(f,x=0) Impedance

