

21 KL 2160 SUB

SWETON®



Introducing **21 KL 2160 SUB**, a true giant in the KL Series, designed for extreme performance and unrelenting low-end delivery. Engineered with a massive 6-inch voice coil, this 21-inch subwoofer handles 3000 watts AES power, making it the go-to choice for high-impact sub-bass in large-scale outdoor and professional applications.

This subwoofer still delivers commanding low-frequency authority – thanks to its very high moving mass ($M_{ms} = 448.3 \text{ g}$) and enormous motor force ($BI = 37.51 \text{ N/A}$). The high mechanical Q ($Q_{ms} = 15.54$) ensures exceptional cone control, while the balanced total Q ($Q_{ts} = 0.53$) supports effective use in reflex or bandpass enclosures. This makes the 21 KL 2160 SUB ideal for dynamic playback in demanding sound reinforcement scenarios like festivals, DJs, and touring rigs.

Recommended Enclosures:

Type	Volume (Net)	Port Size (Dia x Length)	Tuning Frequency
Vented (Reflex)	180–220 L	Ø160 mm 180 mm (dual ports)	~40–45 Hz
Bandpass 4th Order	90 L sealed + 120 L ported	Ø160 mm 200 mm	~42 Hz
Horn-Loaded	Can be used in large horn enclosures	Based on path length	High SPL efficiency

Recommended Crossover Points:

Filter Type	Frequency Range	Slope
Low Pass	80–120 Hz	24 dB/oct (Linkwitz-Riley)
High Pass (optional)	30–35 Hz	12 dB/oct

Applications:

- Ground-shaking subwoofer stacks for concerts & festivals
- DJ setups demanding extreme low-end
- Processions, roadshows, and truck-mounted rigs
- Cinema bass arrays and large club installs

Why Choose 21 KL 2160 SUB?

- **Massive Power Handling:** With a 3000W AES rating and a 6-inch voice coil, it's built to withstand extreme power without thermal breakdown.
 - **High BL Factor (37.51 N/A):** Ensures tight, controlled bass with superior cone control even at high excursions – delivering deep, clean impact.
 - **Robust Suspension and High Mms:** The 448.3 g moving mass and strong mechanical stiffness provide punchy and well-damped low-frequency performance ideal for demanding outdoor and touring environments.
 - **Designed for Pressure, Not Just Extension:** The large cone area ($S_d = 1698.23 \text{ cm}^2$) and motor strength enable huge air displacement, making it ideal for high-SPL bass where pressure and impact are more critical than ultra-low extension.
 - **KL Series Advantage:** Engineered for durability, cost-efficiency, and maximum output, this model brings flagship-level performance at a better value.
 - **Versatile for Reflex, Bandpass, and Horn Enclosures:** Easily adapts to different box types for mobile rigs, truck setups, or fixed installs.
- If your requirement is brutal bass output, thermal stability, and reliability under pressure, the 21 KL 2160 SUB is the powerhouse you can count on.

SPECIFICATIONS & PARAMETERS

Specifications

Nominal Diameter	575 mm
Nominal Impedance	8 Ω
Nominal Power Handling (AES)	3000 W
Program Power	6000 W
Sensitivity (1W/1m)	95 dB
Frequency Range	40-1000 Hz
Magnet Material	Ferrite
Voice Coil Diameter	152 mm (6.0 in)
Winding Material	COPPER
Former Material	GLASS FIBRE
Winding Type	In/Out

Mounting Info

Overall Diameter	575 mm
Bolt Circle Diameter	555 mm
Baffle Cutout Diameter	502 mm
Depth	215 mm
Flange and Gasket Thickness	14.5 mm
Gross Weight	50 Kgs

Parameters

Resonant Frequency	Fs	47 Hz
DC Resistance	Re	5.79 Ω
Electrical Q	Qes	0.55
Mechanical Q	Qms	15.54
Total Q	Qts	0.53
Compliance Equivalent Volume	Vas	102.11 Ltrs
Peak Diaphragm Displacement Volume	Vd	2.31 Ltrs
Effective Surface Area of Cone	Sd	1698.23 cm ²
Reference Efficiency	η_0	1.85%
Moving Mass including air load	Mms	448.30 gms
Motor Strength	Bl	37.51 T-m
Voice Coil Inductance	Le	1.91 mH
Efficiency Bandwidth Product	EBP	85 Hz
Voice Coil Overhang	Xmax	± 13.75 mm

Recone Kit

Recone Kit Number	REC21KL2160SUB
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Z(f,x=0) Impedance

