SOVOX

MC181

SPECIFICATION

Passive cinema subwoofer with a single 18-inch driver on a cast-aluminium chassis in a bass-reflex enclosure driven from a conventional amplifier channel, for LFE reproduction. Hall depth ≤ 8/11 m (1 unit), ≤ 11/16 m (2 units)[1]

01 FEATURES ● Performance | ▲ Engineering | ■ Economy & Maintenance



- ● A single 18″ driver: Φ114.3 mm voice coil with a 36 mm winding, for long-excursion LFE output.
- ● A rigid cast-aluminium chassis supports stable operation under high mechanical loads.
- ● 100 dB sensitivity with an 800 W AES 100-hour rating (1600 W program).
- ● 129 dB rated maximum SPL — continuous, on the AES 100-hour basis.
- ▲ Six punched vents in the voice-coil former and a Φ45 mm magnet-assembly vent form a thermal path for sustained high-power operation.
- ▲ MDF bass-reflex enclosure with a speckle-paint finish, 666 × 690 × 560 mm, 55 kg net.
- ▲ Recommended 120 Hz low-pass and 25 Hz high-pass (24 dB/oct).
- ■ 8 Ω nominal; configured in multiples to match hall depth and LFE target level.

02 OVERVIEW

The MC181 is a passive cinema subwoofer in the MC Series for high-dynamic LFE reproduction in large auditoriums and screening rooms. The system comprises a single 18″ low-frequency driver — 114.3 mm voice coil, 36 mm winding, cast-aluminium chassis — in an MDF bass-reflex enclosure with a speckle-paint finish, with a 30 Hz–500 Hz response (±3 dB), 22 Hz usable at –10 dB and an 8 Ω nominal load.

At 100 dB sensitivity and an 800 W AES 100-hour rating it produces a 129 dB rated maximum SPL on a continuous basis. The large voice coil, longer winding and cast-aluminium chassis provide a structural basis for long excursion and sustained mechanical loading. A 120 Hz low-pass is recommended for integration, with a 25 Hz high-pass protecting the driver below its operating band. The cabinet measures 666 × 690 × 560 mm and weighs 55 kg net.

03 APPLICATIONS

Cinema LFE channels · Large commercial auditoriums · Screening rooms · Private cinemas

04 SPECIFICATIONS

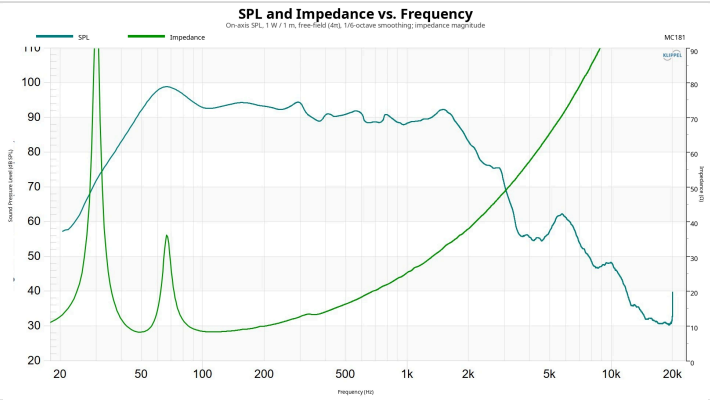
MODEL	MC181
PRODUCT TYPE	Cinema Subwoofer
SYSTEM TYPE	Passive Subwoofer
DRIVER CONFIGURATION	18" LF × 1
NOMINAL IMPEDANCE	8Ω
FREQUENCY RESPONSE (±3 DB @ 2Π)[2]	30 Hz–500 Hz
FREQUENCY RANGE (-10 DB @ 2Π)[2]	22 Hz–500 Hz
AES 100-HOUR POWER RATING[3]	800W
AES 2-HOUR POWER RATING	1000W
PROGRAM POWER[4]	1600W
SENSITIVITY (2Π) @1W/1m	100dB
RATED MAXIMUM SPL /1m @ 2Π	129dB
CALCULATED MAXIMUM SPL /1m @ 2Π[5]	135dB
RECOMMENDED LPF	120 Hz@24 dB/oct
RECOMMENDED HPF	25 Hz@24 dB/oct
COVERAGE ANGLE (H×V)	—
ENCLOSURE TYPE	Cinema subwoofer enclosure
ENCLOSURE MATERIAL / FINISH	MDF · Speckle-paint finish
INPUT CONNECTORS	Binding posts
MOUNTING OPTIONS	Floor-standing
DIMENSIONS W×H×D (mm)	W666 × H690 × D560 mm
NET WEIGHT	55 kg

Office: Room A401, Gaosheng Building, Zhongxin Road, Bao'an District, Shenzhen,China
Factory: SOVOX Technology Park, Qingling Road, Huiyang District, Huizhou,China
Email · info@sovox.com
Web · www.sovox.com
© 2026 SOVOX. All rights reserved.
Specifications subject to change without notice.

05 FREQUENCY RESPONSE

On-axis frequency response, 1W/1 m, free-field, 1/6-octave smoothing[6]

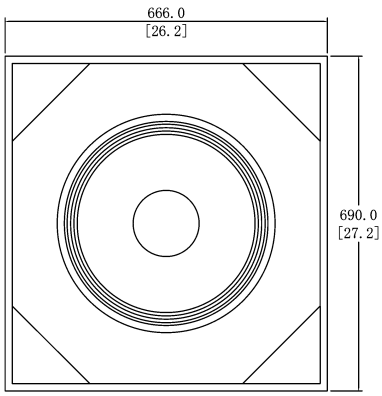
MC181



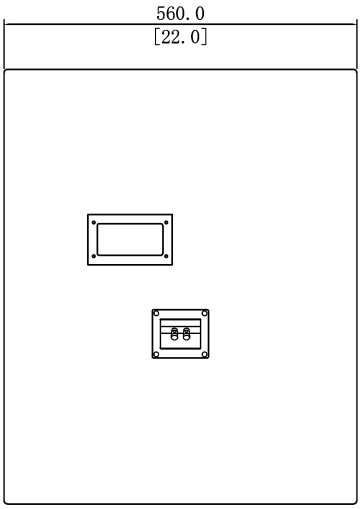
06 DIMENSIONAL DRAWINGS

Front, side and top views, dimensioned in millimetres

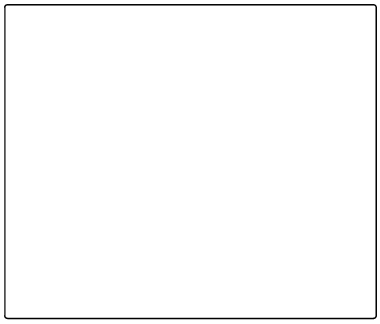
THREE EQUAL IMAGE FRAMES · FIT WITHOUT CROPPING



Front View



Side View



Top View

SPECIFICATION NOTES

1 Two length values are given: the first is the usable range on continuous power, the second on program power. Program power is a short-term maximum output and is not a level the system can sustain continuously. Target levels follow the SMPTE ST 202 / RP 200 cinema reference level: 95 dB for LFE plus 20 dB peak headroom, measured at the reference listening position (RLP); hall depth = listening distance x 1.5. Listening distance is derived from free-field distance attenuation. The continuous-power range uses the rated maximum SPL in this table; the program-power range uses the rated value +3 dB (program power being twice the continuous power). The calculated maximum SPL (rated +6 dB, short-term peak) is not used for these figures. Subwoofer arrays use non-coherent summation (+3 dB per doubling of cabinet count, +3 dB per doubling of power).
Screen loss, power compression, system limiting and room gain are not included - this is a theoretical estimate, not a measured guarantee; on-site verification is recommended. Operating beyond the recommended figure may result in, but is not limited to: dynamic compression, increased distortion, extraneous noise, and in severe cases equipment damage.

2 Low-frequency response and sensitivity specifications are referenced to half-space (2π) conditions, representative of typical cinema baffle-wall installation. Frequency-response graphs are measured in an anechoic free-field (4π) environment unless otherwise noted. In the low-frequency region the same loudspeaker measures about 6 dB higher under 2π than under 4π (in practice 3–6 dB depending on frequency and baffle conditions); this is a difference of measurement convention, not of performance.

3 Rating based on an IEC filtered random-noise test signal, band-limited 30 Hz–500 Hz, with a peak-to-average ratio of 6 dB

4 Recommended amplifier output at the applicable impedance should not exceed the program power, giving an unclipped output waveform while avoiding loudspeaker damage; an amplifier capable of at least the RMS continuous power (AES 100 h) is recommended to realize full loudspeaker performance. The actual amplifier match should be determined by calculation for the listening distance (see note 1).

5 Calculated maximum SPL is derived from the rated (continuous) power and half-space (2π) sensitivity and is a calculated, not measured, figure; at a 6 dB peak-to-average ratio it exceeds the rated value by 6 dB, representing short-term peak capability rather than a level the system can sustain.

6 The frequency-response graphs on this page are measured on-axis at 1 W/1 m in an anechoic free-field (4π) environment with 1/6-octave smoothing; the frequency response and sensitivity in the specification table are stated under half-space (2π) conditions. Lower readings in the low-frequency region of the graph therefore reflect the difference in convention rather than a difference in performance. 2π-format curves are available on request.

Office: Room A401, Gaosheng Building, Zhongxin Road, Bao'an District, Shenzhen,China
Factory: SOVOX Technology Park, Qingling Road, Huiyang District, Huizhou,China
Email · info@sovox.com
Web · www.sovox.com

© 2026 SOVOX. All rights reserved.
Specifications subject to change without notice.