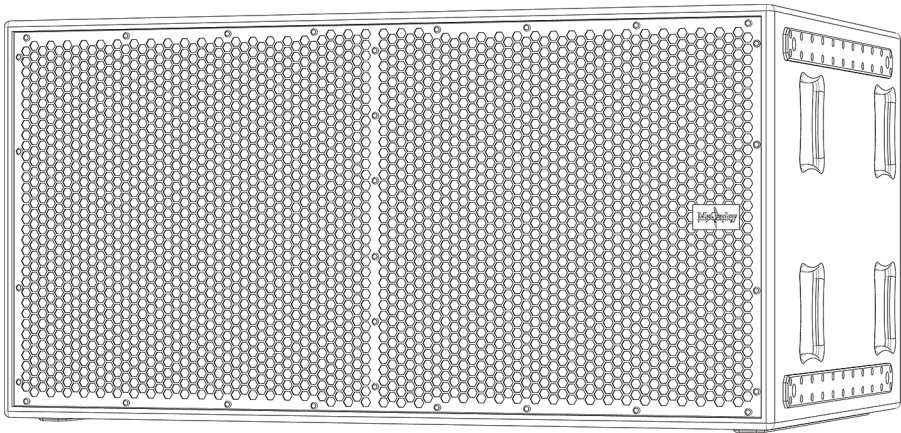


# TECHNICAL SPECIFICATIONS

# M88

Product Group: Touring Class  
System Type: Subwoofer, Dual 18"



## FEATURES AND ADVANCES

- High Output, High Performance
- Heavy Duty Tour-Grade Construction
- Integrated Casters and handles
- Integrated Locking Skids On Two Faces
- Weather and Wear Resistant

## PRODUCT DESCRIPTION

The M88 is a high efficiency, high power handling loudspeaker designed for touring sound sub-bass applications. The M88 features two, 4" voice coil, long excursion 18" cone drivers mounted in a mechanically and acoustically optimized bass reflex enclosure. The cone driver incorporates McCauley Sound's latest FEA optimized neodymium motor with a new hybrid paper composite cone body for increased linearity and lower distortion at high output levels. The M88 enclosure features a large vent area for decreased port turbulence and integrated handles and casters which allow for easy setup, loading and transportation.

## APPLICATIONS

- Stadiums and Arenas
- Night Clubs and Concert Halls
- Theme Parks
- Theatrical Sound Reinforcement
- House of Worship

## CONSTRUCTION

The enclosure is constructed of multi-ply void-free birch hardwood plywood and is coated with a weather and wear resistant ProCoat™ polyurea hybrid finish. All rigging components are weather protected with a heat cured epoxy powder coat finish. Components in the front of the enclosure are protected by a flat grill made from perforated steel that is coated with heat cured epoxy powder, and lined with acoustically transparent foam.

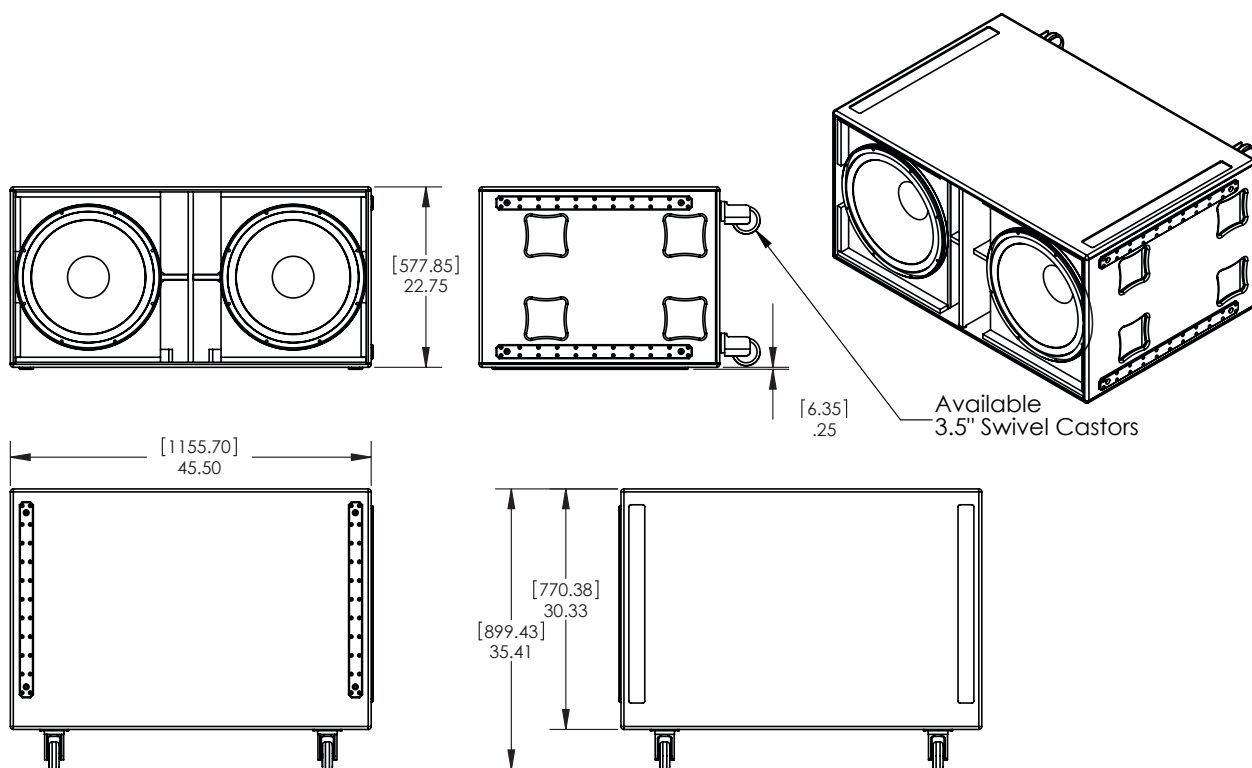
## PERFORMANCE PARAMETERS

System Type	Subwoofer, Dual 18"
Frequency Response	
-10dB	28Hz - 250Hz
+/- 3dB	35Hz - 150Hz
Sensitivity	
LF 1	98dB @ 2.83V 1 m
LF 2	98dB @ 2.83V 1 m
LF	101dB @ 2.0V 1m both drivers
Maximum SPL	(cont. / peak)
LF 1	127dB / 133dB calculated ground plane
LF 2	127dB / 133dB calculated ground plane
LF	133dB / 139dB calculated ground plane
Power Ratings	(AES / Program)
LF 1	800w / 1600w @ 8Ω
LF 2	800w / 1600w @ 8Ω
LF	1600w / 3200w @ 4Ω

## PHYSICAL PROPERTIES

Weight	185Lbs / 84.1kg
Dimensions	
inches	22.75 H x 45.50 W x 35.41 D
centimeters	57.78 H x 115.57 W x 79.78 D
Enclosure Material	5/8" 12 ply birch laminate
Hardware	Integrated Locking Skids on Two Faces Optional 3/8-16 reinforced hang points
Finish	Procoat™ Polyurea-Hybrid Weatherproofing (Black is standard, White and / or Custom Colors Available)
Transducers	
LF	(2) 18" Cone Transducers, 4" Voice Coil
Connectors	Neutrik™ Speakon NL4
LF 1	Pins 1+ / 1-
LF 2	Pins 2+ / 2-
Optional Accessories	M88CV (Touring Cover For M88)

## DIMENSIONAL ILLUSTRATIONS



## ARCHITECTS AND ENGINEERS SPECIFICATIONS

The subwoofer loudspeaker system shall consist of two (2) 18 in. (460 mm) transducers mounted in an optimally vented bass reflex enclosure, tuned for maximum low frequency response. Each transducer shall have a 4 in. (102 mm) diameter voice coil, high flux density Neodymium motor, Aluminum heat sink, and an excursion of least  $\pm 0.6$  in (15 mm). The horizontal and vertical coverage for a single loudspeaker system shall be omnidirectional in the operating band. Multiple loudspeaker systems in an array shall be capable of producing a directional coverage pattern.

The typical performance specifications shall be as follows: The unprocessed system frequency response shall vary no more than  $\pm 3$  dB from 35 Hz to 150 Hz measured on axis. The measured sensitivity, (when 2.0 V is applied to each transducer powered in parallel as a 4 ohm load,) shall be at least 101 dB SPL at 1 m ground-plane, from 40 Hz to 80 Hz. Each transducer shall have a rated power capacity of 800W per AES Standard AES2-2012 (1600 W continuous program power) and a nominal impedance of 8 ohms inside the operating band.

The loudspeaker enclosure shall have a maximum weight of 185 lbs. (84.1 kg) and shall measure 45.5" (1156 mm) wide, 22.75" (578 mm) in height, and 35.41" (900 mm) in depth. The enclosure shall be constructed of multi-ply void-free birch hardwood plywood and coated with a weather and wear resistant ProCoat™ polyurethane hybrid finish. Components in the front of the enclosure shall be protected by a flat grill made from perforated steel and coated with heat cured epoxy powder. All rigging and other hardware pieces shall be weather protected with a heat cured epoxy powder coat finish.

Input connectors shall be two locking Neutrik NL4 wired in parallel with 12 AWG wire. The connectors shall have a contact resistance of less than 3 mΩ, insulation rating of at least 250 Vrms, and rated continuous current rating of 30 A per contact. The lifetime of the connectors shall be at least 5000 mating cycles. The connectors shall meet or exceed UL 94 HB flammability standards.

Optional 3/8"-16 UNC threaded mounting/suspension points can be provided upon specification.

The high performance subwoofer loudspeaker system shall be the McCauley Sound model M88.