

## C300z

Featuring legendary Mackie sound quality and durability, the lightweight C Series 2-way Precision Passive loudspeakers deliver optimum performance in portable PA, stage monitor and permanent installation applications. The C300z is a full-range portable loudspeaker providing high-output, ultra-wide dispersion and low-distortion performance in a compact, composite molded enclosure.

A heat-treated titanium compression driver with multi-cell aperture directs pristine highs through an exponential high-frequency waveguide, allowing for ultra-wide dispersion of highs and mids. In fact, the C300z can deliver clear, smooth sound to audience members up to 45° off axis.

The custom-designed high-power 12-inch woofer can take a pounding, plus its 3-inch voice coil allows the driver to run cooler, delivering consistent performance even after long hours of use at near peak volumes.

The crossover in the C300z is a unique Low Impedance Compensated Crossover (LICC) design. With EQ and crossover points meticulously chosen so that beamwidth patterns match in both drivers, C300z loudspeakers offer natural sound at all volume levels.

The center of gravity, handle locations, handle design, position of fly-points and ease of use have been ergonomically designed. There is also an integrated pole mount on the bottom of the cabinet and a weather-resistant steel grille. The asymmetrical trapezoidal cabinet has been designed to provide an ideal floor monitoring position.

The cabinet is constructed of high-pressure injected polypropylene. The enclosure features reinforcement ribbing and structural strengthening resulting in a strong, super-rigid design providing ideal acoustical characteristics.

## APPLICATIONS

Small to mid-size club/band PA systems, houses of worship, DJs, vocal/band monitor wedges, gymnasiums, banquet halls, conference rooms and many, many more.



## FEATURES:

- 2-way portable Precision Passive loudspeaker system
- 750W / 300W RMS peak power handling at 8 Ω
- 12" long-throw low-frequency transducer with 3" voice coil
- High-output 1.75" titanium compression driver
- Ultra-wide, smooth dispersion via multi-cell horn aperture and constant directivity horn
- Integrated Low Impedance Compensated Crossover (LICC) with full driver protection
- Lightweight for ultimate portability (46 lb / 20.9 kg)
- Asymmetrical trapezoidal cabinet for floor monitor positioning
- Stand / Pole-mountable
- Flyable via ten M10 rigging points using the optional eyebolt kit

## C300z SPECIFICATIONS

### Acoustic Performance

Frequency Response (-3 dB)	55 Hz-18 kHz
Frequency Range (-10 dB)	45 Hz-20 kHz
Max SPL long-term	123 dB @ 1 m
Low-Frequency Crossover Type	24 dB / octave, time offset corrected
High-Frequency Crossover Type	24 dB / octave
Crossover Point	1800 Hz

### Audio

Input / Thru Connector Type	Speakon™-style NL-4 jack 1/4" TS jack
Input Impedance	8 Ω
Power Handling	
RMS	300 watts
Music	500 watts
Peak	750 watts

### Low-Frequency Transducer

Diameter	12 in / 300 mm
Voice Coil Diameter	3 in / 75 mm
Magnet Material	Ferrite

### High-Frequency Transducer

Diaphragm Diameter	1.75 in / 44.5 mm
Diaphragm Material	Heat treated titanium
Horn Exit Diameter	1 in / 24.5 mm

### Horn Design

Type	Conical and Exponential
Mouth Size	12 in / 305 mm (W) x 7 in / 178 mm (H)
Horizontal Coverage	90° (1 kHz - 20 kHz)
Vertical Coverage	45° (2.8 kHz - 20 kHz)

### Safety Features

Over-Excursion Protection	Second-order high-pass filter
Driver Protection	Dynamic protection for compression driver

### Construction Features

Basic Design	Asymmetrical Trapezoidal
Material	Polypropylene
Finish	Black, textured finish
Handles	One on each side, one on top
Grille	Perforated metal with weather-resistant coating
Operating Temperature Range	-10° C to 45° C 14° F to 113° F

### Physical Properties (packaged product)

Height	26.5 in / 673 mm
Width	16.8 in / 427 mm
Depth	15.5 in / 394 mm
Shipping Weight	52.0 lb / 23.6 kg

### Physical Properties (product)

Height	26.1 in / 663 mm
Width	16.0 in / 406 mm
Depth	14.8 in / 376 mm
Net Weight	46.0 lb / 20.9 kg

### Mounting Methods

Floor mount, pole mount, or fly via 10 integrated M10 threaded inserts (two each located on each side, top, bottom and rear of enclosure)

### Options

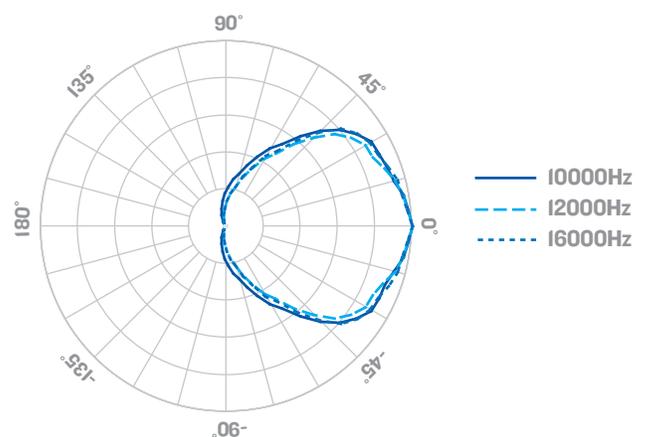
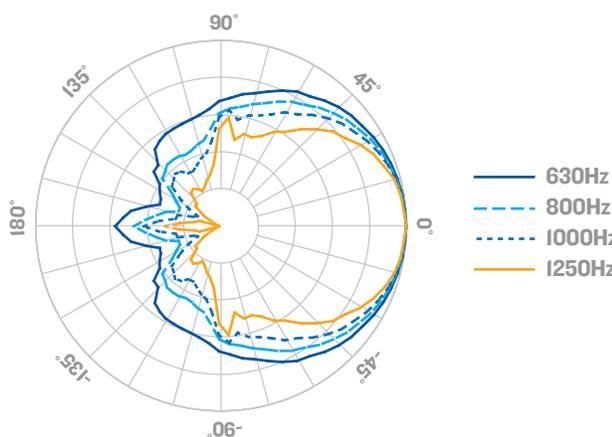
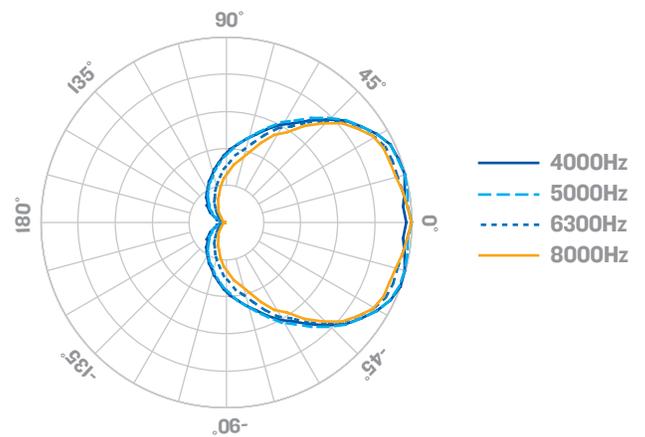
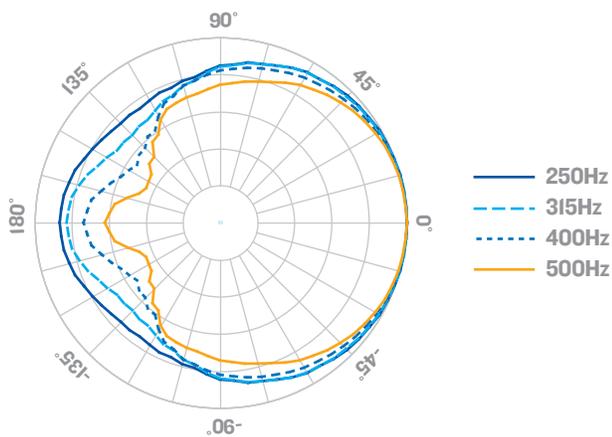
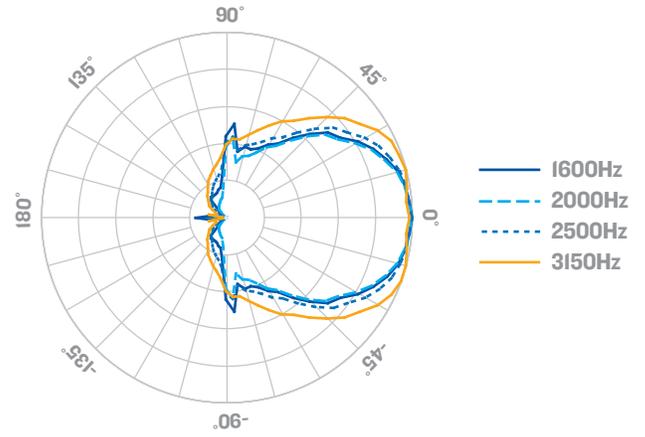
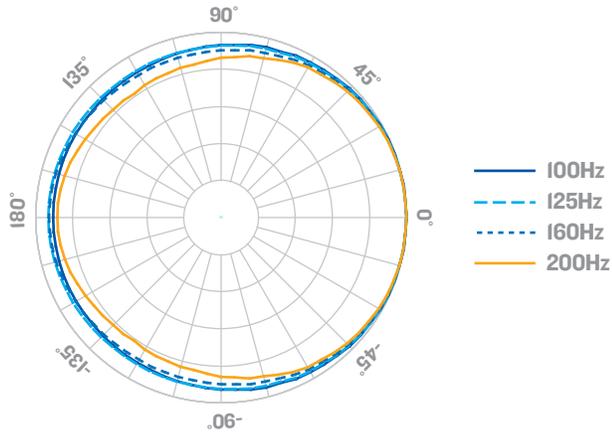
PA-A1 forged shoulder eyebolt kit (4 x M10 x 1.5 mm x 20 mm)	P/N 0031943
SPM200 Loudspeaker Pole Mount	P/N 2035170-01

### Ordering Information

C300z Passive, 2-way Loudspeaker	P/N 2033793
C300z Passive, 2-way Loudspeaker, CN	P/N 2033793-05

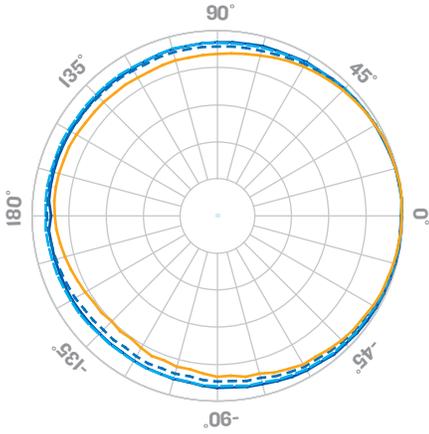
## C300z HORIZONTAL POLARS

Gridlines: 6 dB axial / 15 degrees radial

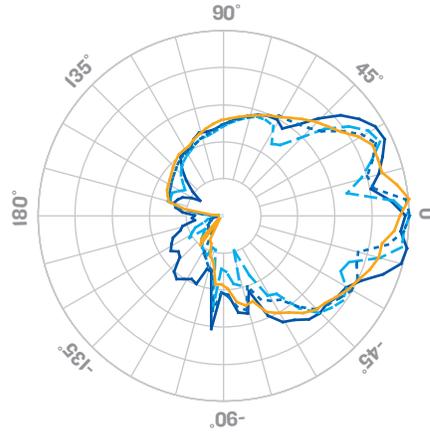


## C300z VERTICAL POLARS

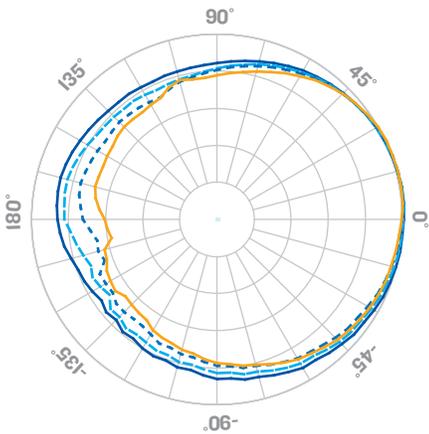
Gridlines: 6 dB axial / 15 degrees radial



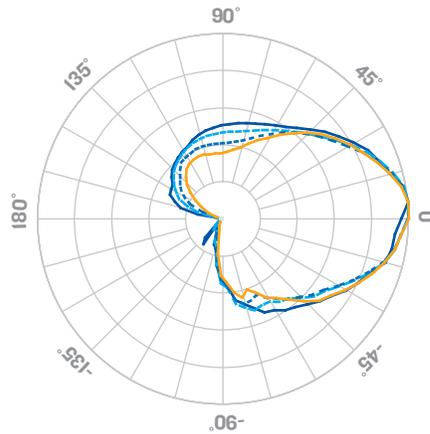
- 100Hz
- - - 125Hz
- · · 160Hz
- 200Hz



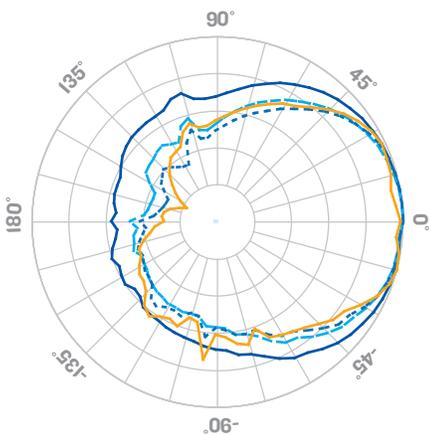
- 1600Hz
- - - 2000Hz
- · · 2500Hz
- 3150Hz



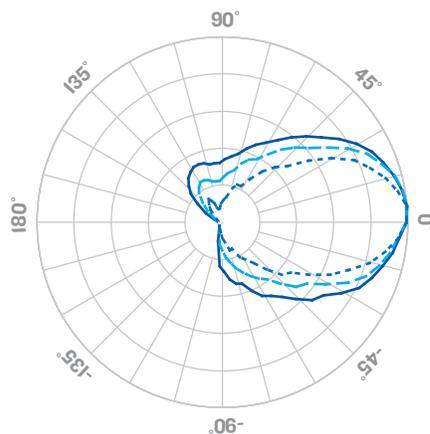
- 250Hz
- - - 315Hz
- · · 400Hz
- 500Hz



- 4000Hz
- - - 5000Hz
- · · 6300Hz
- 8000Hz

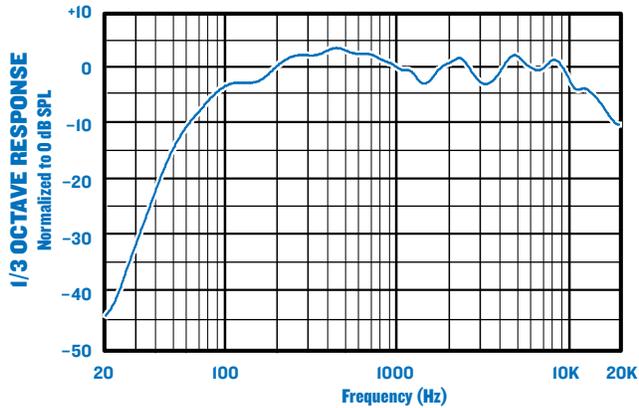


- 630Hz
- - - 800Hz
- · · 1000Hz
- 1250Hz

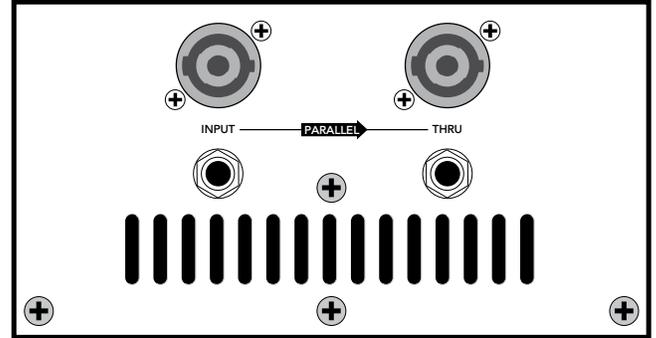


- 10000Hz
- - - 12000Hz
- · · 16000Hz

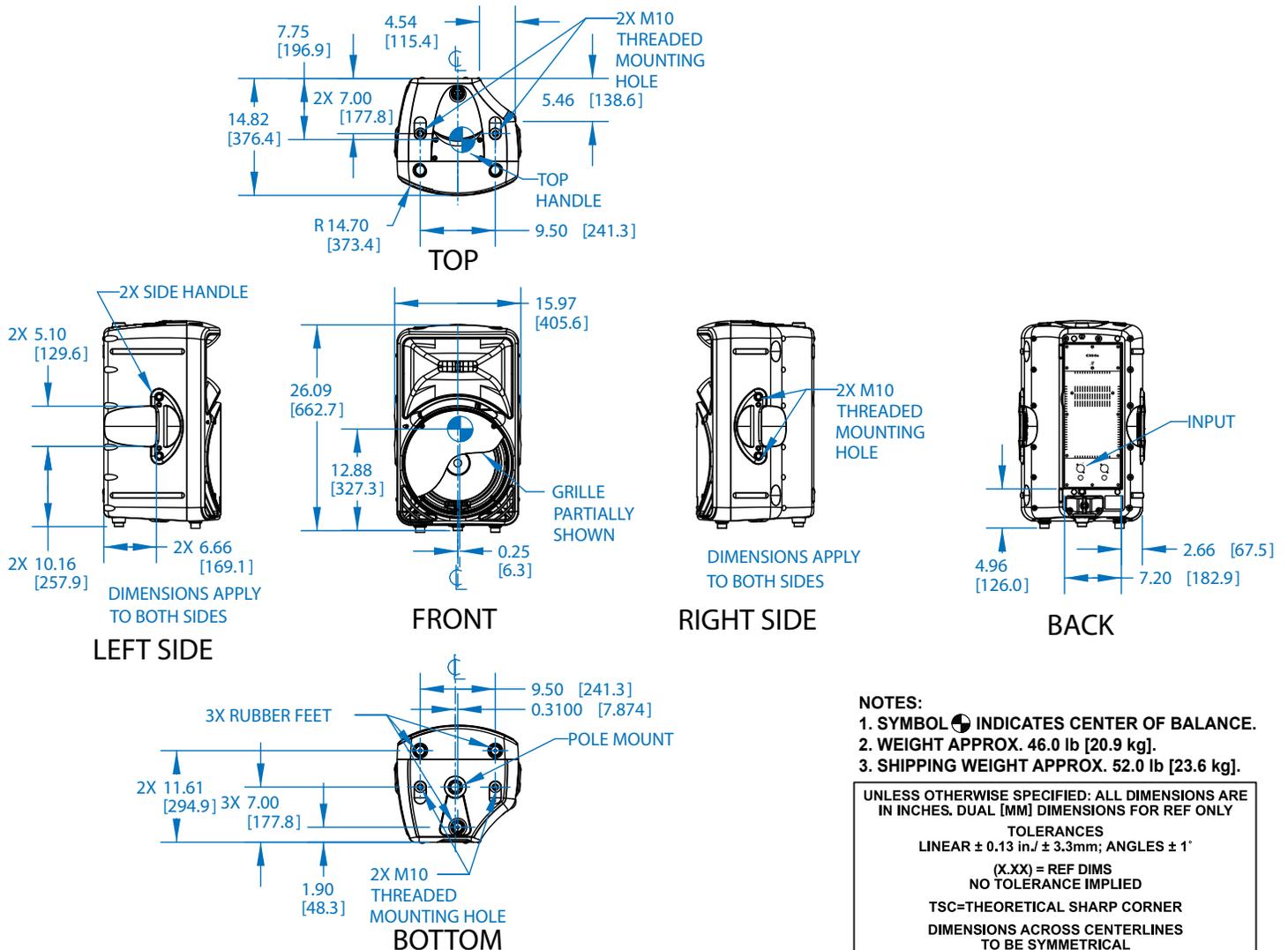
## C300z FREQUENCY RESPONSE



## C300z INPUT PANEL



## C300z DIMENSIONS

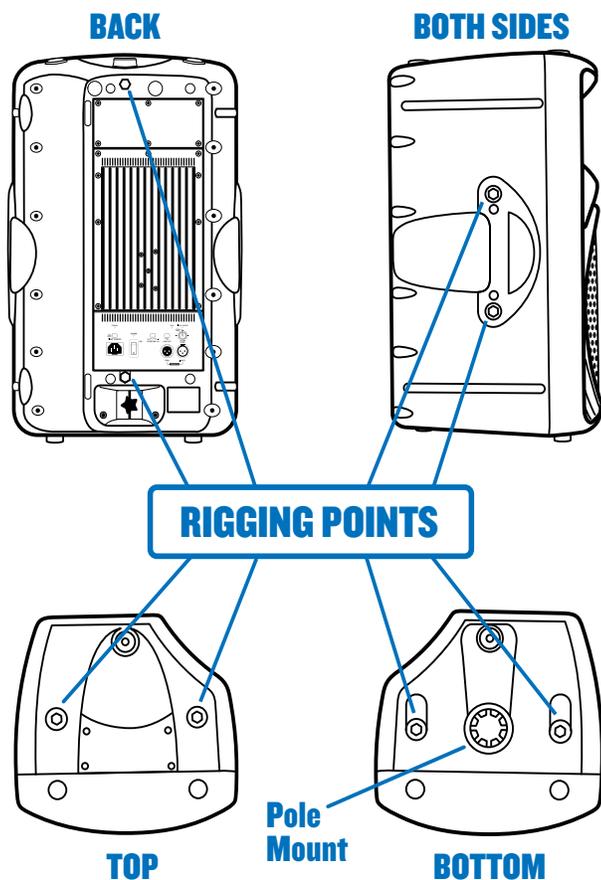


- NOTES:
1. SYMBOL INDICATES CENTER OF BALANCE.
  2. WEIGHT APPROX. 46.0 lb [20.9 kg].
  3. SHIPPING WEIGHT APPROX. 52.0 lb [23.6 kg].

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. DUAL [MM] DIMENSIONS FOR REF ONLY

TOLERANCES  
 LINEAR ± 0.13 in./ ± 3.3mm; ANGLES ± 1°  
 (X.XX) = REF DIMS  
 NO TOLERANCE IMPLIED  
 TSC=THEORETICAL SHARP CORNER  
 DIMENSIONS ACROSS CENTERLINES  
 TO BE SYMMETRICAL

## C300z FLY POINTS



Electronic files for this product are available at:

[www.mackie.com](http://www.mackie.com)

Specification Sheet

C300z\_SS.PDF

Owner's Manual

C300z\_OM.PDF

# MACKIE®

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