

TH-12A

The Mackie TH-12A is a full-range, portable, powered loudspeaker system providing high-output, ultra-wide dispersion and low-distortion performance in a compact, lightweight design. Two Fast Recovery™ amplifiers independently power a 12-inch neodymium woofer and a precision 1-inch compression driver. Mackie's sophisticated Active electronics provide phase correction, crossover, time correction, equalization and protection circuitry.

Mackie-designed Active electronics provide a host of processing designed to enhance the performance of the TH-12A. Equalization, crossover, and time alignment are working at all times to improve sonic performance. Protective circuitry includes over-exursion protection, thermal protection shutdown, auto reset, and driver protection, including independent HF and LF compressors.

The TH-12A features a number of dedicated controls including an EQ on/off switch, a 3-band EQ/contour section, and a single microphone and line input level control.

The center of gravity, handle locations, handle design, and ease of use have been ergonomically designed. There is also an integrated pole mount cup and a weather-resistant steel grille. The 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 club/band PA systems, houses of worship, DJs, vocal/band monitor wedges, gymnasiums, banquet halls, conference rooms and many, many more.



FEATURES:

- 2-way bi-amplified, optimized powered loudspeaker system
- 400W peak of ultra-efficient Fast Recovery™ amplification
 - LF 300W peak power (Class-D)
 - HF 100W peak power (Class-A/B)
- High-output transducers
 - 12" high-precision woofer
 - 1" compression driver
- Mackie Active electronics provide total system optimization
 - Precision 2-way crossover
 - Transducer time-alignment
- User-adjustable 3-band contour EQ with sweepable mid-frequency
- Mic/Line input for direct connection of a microphone or mixer output
- Tough, impact-resistant polypropylene enclosure
- Pole-mountable and floor wedge-able
- Extremely lightweight and portable (25.5 lb / 11.6 kg)

TH-12A SPECIFICATIONS

Acoustic Performance

| | |
|-----------------------------|------------------|
| Frequency Response (-10 dB) | 57 Hz - 20 kHz |
| Frequency Response (-3 dB) | 70 Hz - 18.5 kHz |
| Horizontal Coverage Angle | 90° |
| Vertical Coverage Angle | 60° |
| Max SPL long-term | 117 dB @ 1 m |
| Max SPL peak | 120 dB @ 1 m |

Input / Output

| | |
|-----------------|--|
| Input Type | Female XLR Balanced/Unbalanced |
| Input Impedance | 20 k Ω balanced bridging 10 k Ω unbalanced |
| Loop-through | Male XLR Balanced/Unbalanced (parallel with input) |
| Level Control | Rotating knob 0 dB at center |
| Sensitivity | +4 dBu for full output (Level Control @ Center) -36 dBu for full output (Level Control @ Max) |

Transducers

| | |
|----------------|---|
| Low Frequency | 12 in / 305 mm with steel frame, paper cone woofer |
| High Frequency | Horn-loaded 1 in / 25 mm exit, compression driver |

Power Amplifiers

| | |
|--------------------------------|---|
| Low Frequency Power Amplifier | |
| Rated Power | 150 watts, 8 Ω load 300 watts peak |
| Signal-to-Noise Ratio | >94 dB, 20 Hz to 20 kHz, unweighted, referenced to 138 watts into 8 Ω |
| Design | BTL Class D |
| High Frequency Power Amplifier | |
| Rated Power | 50 watts, 4 Ω load 100 watts peak |
| Signal-to-Noise Ratio | >97 dB, 20 Hz to 20 kHz, unweighted, referenced to 50 watts into 4 Ω |
| Design | Class AB |

Electronic Crossover

| | |
|---------------------|----------------|
| Crossover Type | 24 dB / octave |
| Crossover Frequency | 3 kHz |

Equalization

| | |
|------------------|--------------------------------|
| Low | ± 15 dB @ 80 Hz |
| Mid | ± 15 dB sweep 100 Hz-8 kHz |
| High | ± 15 dB @ 12 kHz |
| Direct/EQ Switch | Bypasses EQ section |

Protection Features

| | |
|---------------------------|---|
| Over-excursion Protection | Second-order sub-sonic filter |
| Thermal Protection | Independent amplifier shutdown, auto reset |
| Driver Protection | Independent HF and LF compressors |

AC Power Requirements

| | |
|--------------|-----------------------------------|
| US | 100 - 120 VAC, 50 - 60 Hz 320W |
| EU | 200 - 240 VAC, 50 - 60 Hz 320W |
| AC Connector | 3-pin IEC 250 VAC, 20 A male |

Construction Features

| | |
|-----------------------|---|
| Basic Design | Trapezoidal |
| Material | Polypropylene |
| Finish | Textured |
| Handles | One on each side, one on top |
| Grille | Perforated metal with weather-resistant coating |
| Display LEDs | |
| Front | Power ON |
| Rear | Power ON, OL (overload) |
| Operating Temperature | 0° - 40°C 32° - 104°F |

Physical Properties (packaged product)

| | |
|-----------------|-------------------|
| Height | 25.0 in / 635 mm |
| Width | 15.2 in / 386 mm |
| Depth | 13.2 in / 335 mm |
| Shipping Weight | 30.2 lb / 13.7 kg |

Physical Properties (product)

| | |
|------------|-------------------|
| Height | 23.5 in / 596 mm |
| Width | 14.5 in / 367 mm |
| Depth | 12.4 in / 314 mm |
| Net Weight | 25.5 lb / 11.6 kg |

Mounting Methods

Pole-mountable via the built-in socket on the bottom of the cabinet. Be sure the pole is capable of supporting the weight of the TH-12A.

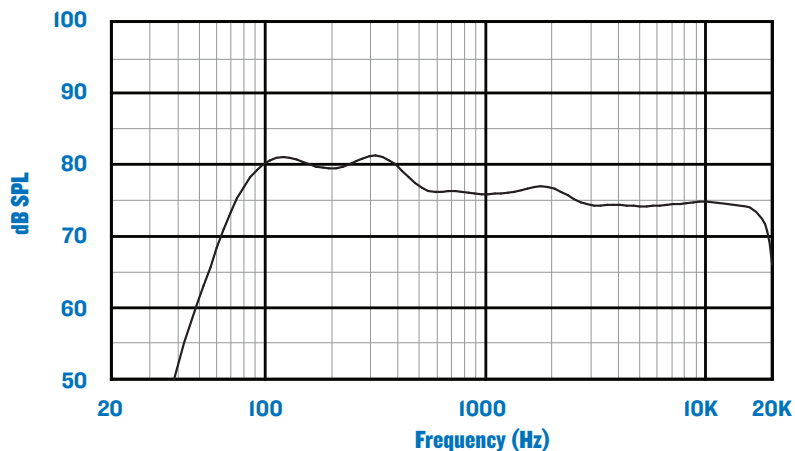
Options

| | |
|-------------------------------|----------------|
| SPM200 Loudspeaker Pole Mount | P/N 2035170-01 |
|-------------------------------|----------------|

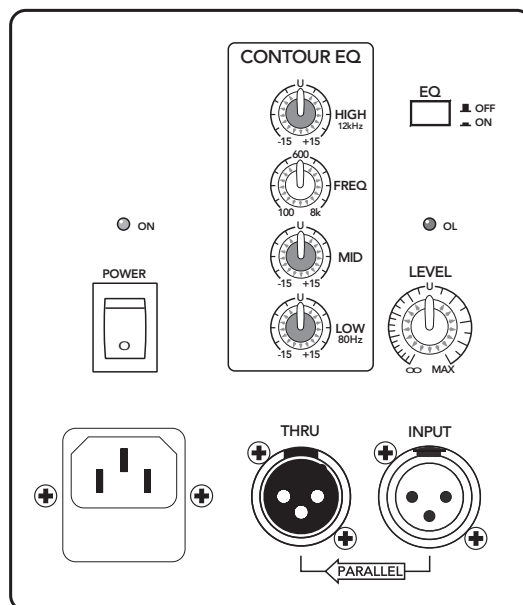
Ordering Information

| | |
|---|----------------|
| TH-12A 12" 2-Way Compact SR Loudspeaker, US | P/N 2035672-00 |
| TH-12A 12" 2-Way Compact SR Loudspeaker, EU | P/N 2035672-01 |

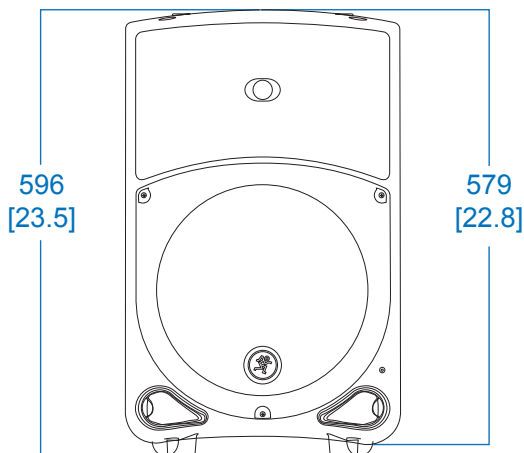
TH-12A FREQUENCY RESPONSE



TH-12A INPUT PANEL



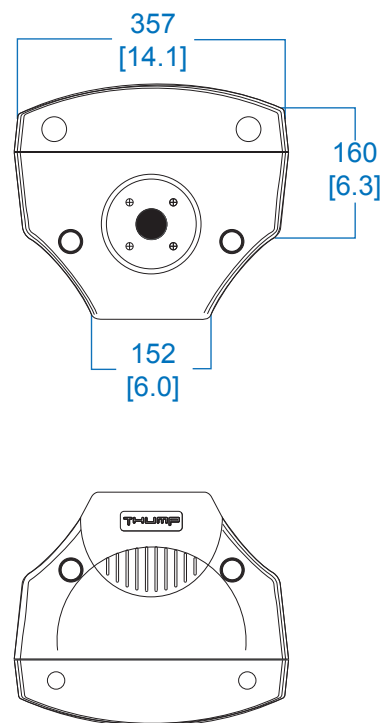
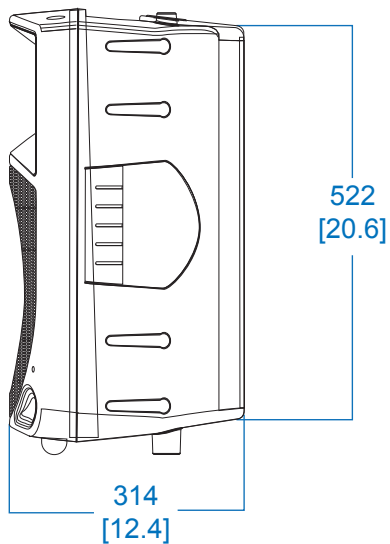
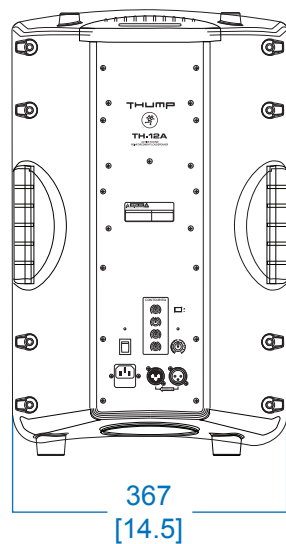
TH-12A DIMENSIONS



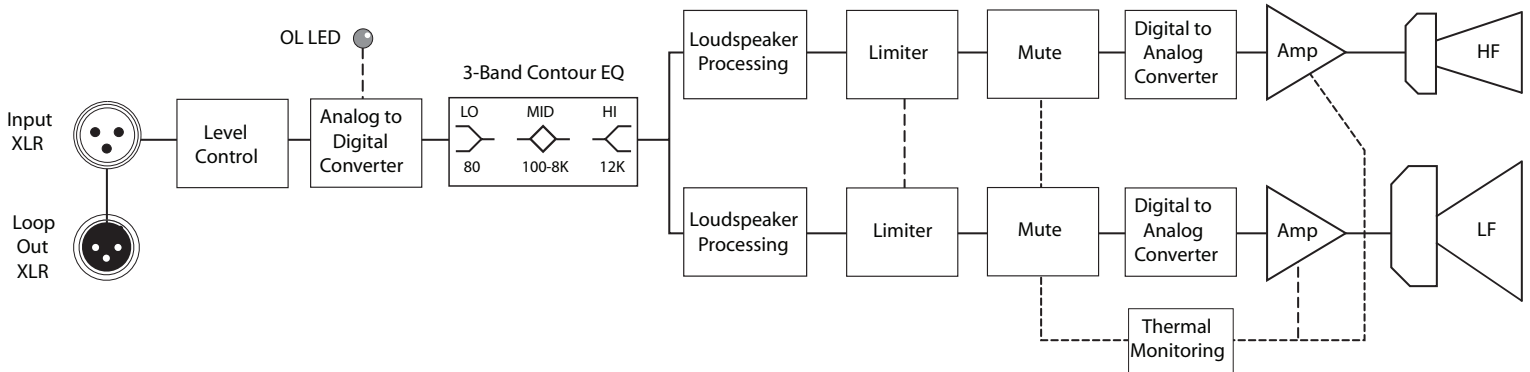
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS. DUAL [INCHES] DIMENSIONS FOR REF ONLY.
 TOLERANCES
 LINEAR ± 3.3 mm / ± 0.13 in; ANGLES $\pm 1^\circ$
 (X.XX) = REF DIMS
 NO TOLERANCE IMPLIED
 TSC=THEORETICAL SHARP CORNER
 DIMENSIONS ACROSS CENTERLINES
 TO BE SYMMETRICAL

NOTES:

1. WEIGHT APPROX. 11.6 kg [25.5 lb]
2. SHIPPING WEIGHT APPROX. 13.7 kg [30.2 lb]



TH-12A BLOCK DIAGRAM



Electronic files for this product are available at:

www.mackie.com

Specification Sheet

TH-12A_SS.PDF

Owner's Manual

TH-12A_OM.PDF

MACKIE®

www.mackie.com

16220 Wood-Red Road NE

Woodinville, WA 98072 USA

800-898-3211, Fax 425-487-4337, sales@mackie.com

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