



The M12i is the installation version of the M12, a product proven over many years in countless deployments in FOH, delay line and monitor applications. Using the same components as M12, the M12i is the perfect adaptation of this speaker for installations.

The phase-aligned and frequency corrected passive crossover allows the M12i to be driven even by standard linear amplifier without DSP presets. For extended fullrange use, or in combination with TWAUDIO subwoofers, there are dedicated presets available for Powersoft and Lab.gruppen amplifier platforms.

The M12i is available in two dispersion patterns, 65° x 45° and 90° x 60° allowing it to be integrated as well as possible in the space.

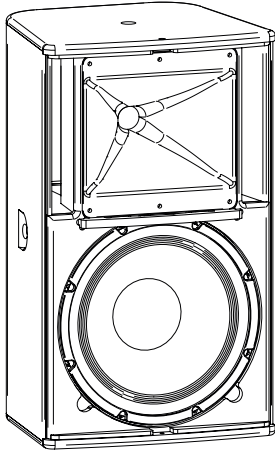
Key Features

- » 12" LF / 1.4" HF combination with excellent voice transmission
- » Cost effective solution using standard amplifiers without DSP
- » Two HF-horn variants available
- » Use with or without subwoofers
- » Vertical and horizontal operation possible
- » Well shaped enclosure
- » Coherent phase response with all TWAUDIO products
- » Operation with standard amplifier or on Lab.gruppen PLM/D or Powersoft K/X series with dedicated TWAUDIO presets

Applications

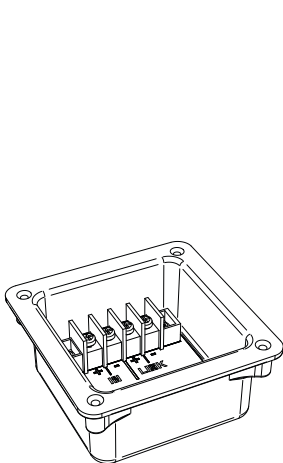
- » Main system for smaller applications in clubs, bars, churches or TV studios
- » As distributed system in bigger installations
- » Under balcony applications
- » Delay-line
- » Horizontal applications

Technical Data

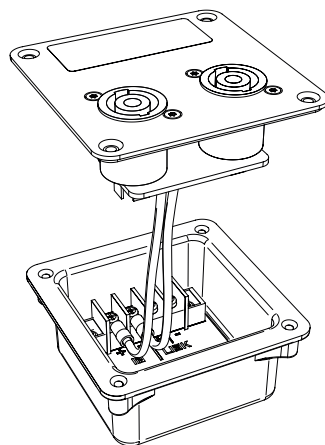


Drivers	1 x 12" LF 1 x 1.4" Exit-HF
Frequency range	58Hz - 19000Hz
Power capacity program/peak	700/ 1400W
Impedance	8Ω
Coverage	65° x 45° or 90° x 60° HF-horn, rotatable
Sensitivity 1W / 1m	101 dB
SPLmax / 1m	132 dB
Connection	screw terminal IN± LINK±
Optional connections	speakON™ NL4 cable gland
Dimensions (H x W x D)	600 x 360 x 314 mm 23.6 x 14.2 x 12.4 in
Weight	19.2 kg 42.3 lbs
Finish	Warnex texture paint (RAL colors optional), polyurea coating (black) optional
Accessories	SBM12i, QBM12i, RSM10, RSM6, FA12

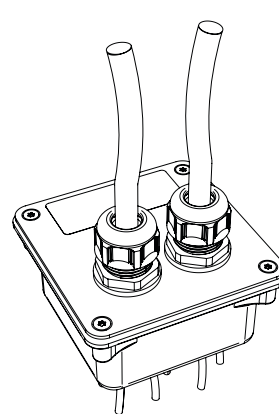
Connections



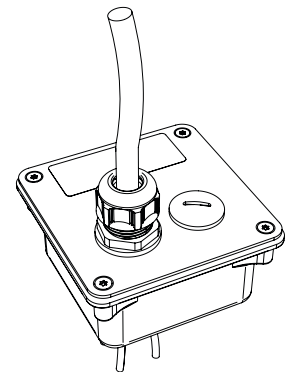
STANDARD SCREW TERMINAL



speakON™ - OPTION
SO top #4708



CABLE GLAND - OPTION
CG #4324



Notes

Frequency range:

Loudspeaker measured with dedicated preset in full space, corner-frequencies are at -6 dB in relation to the average response which is within a tolerance of +/- 3 dB.
Corner-frequencies can be extended with additional EQ.

Sensitivity:

Sound pressure level the loudspeaker generates at 1m distance to its frontgrille within its frequency bandwidth when applying 1W in respect to its nominal impedance (2.83V into 8 Ohms) in full space.

Dispersion:

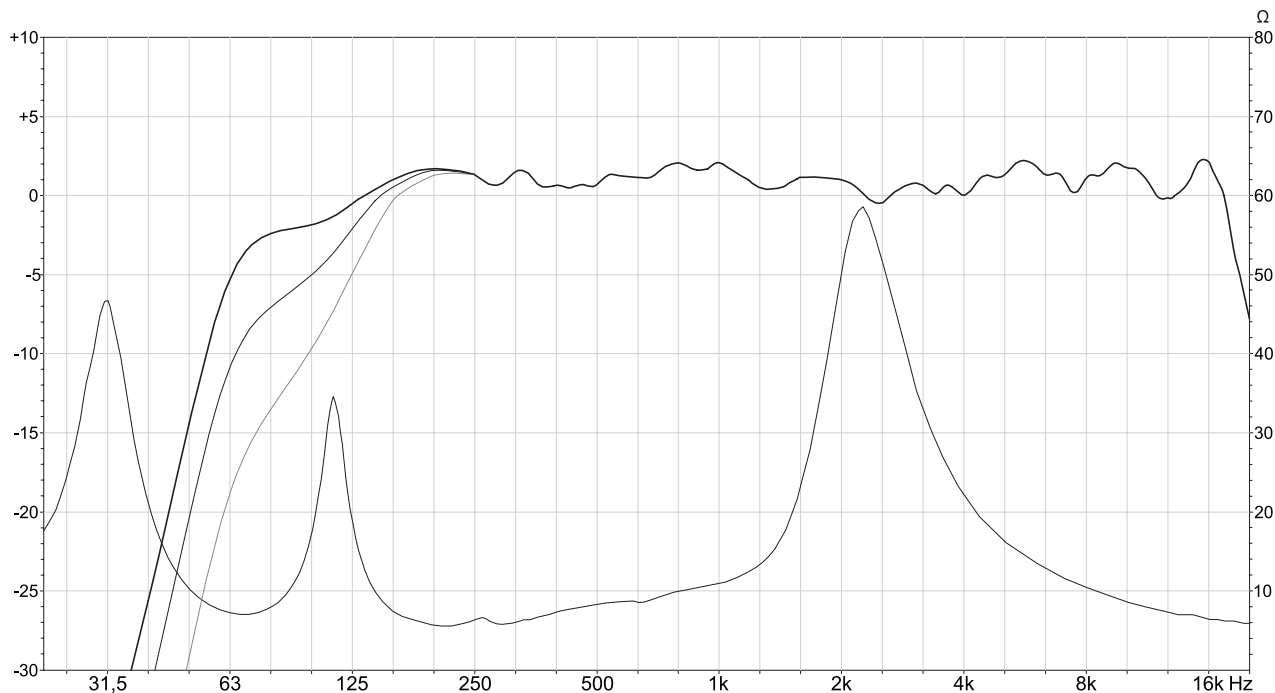
Defines the nominal horizontal by vertical dispersion of the loudspeaker. Angles of nominal dispersion are defined at the points where the average SPL dropped down by -6dB compared to on axis measurement. This affects mainly the mid-high frequency range above 1 kHz. HF-horns are rotatable or/and exchangeable.
Low frequency dispersion mainly depends on the size of the sound source (loudspeaker) except in dedicated "cardioid products".

SPLmax / 1m:

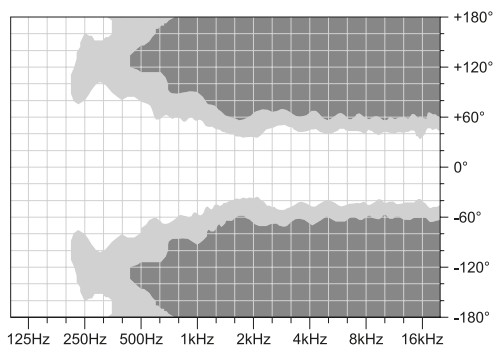
Sound pressure level the loudspeaker will generate at 1m distance to its frontgrille when applying 185 ms burst signals within the frequency bandwidth slightly increasing them until 10% of total harmonic distortion will be reached (-> peak value. RMS value will be 3 dB lower). Without distortion limits and with bandlimited pinknoise with Crest factor 4, the peak SPLmax levels can be up to 10 dB higher at several frequencies.

Frequency response **FULL** | **FLAT** | **CUT**

IMPEDANCE

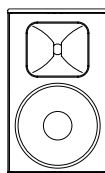


Isobar diagrams **-6dB** | **-12dB**

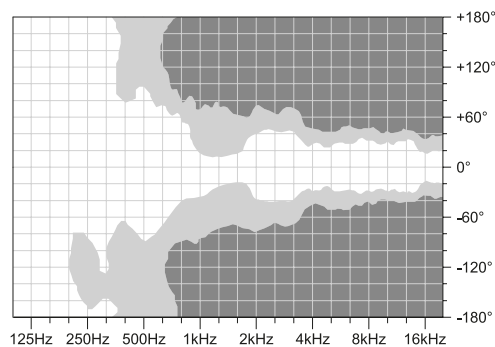


isobar diagram horizontal

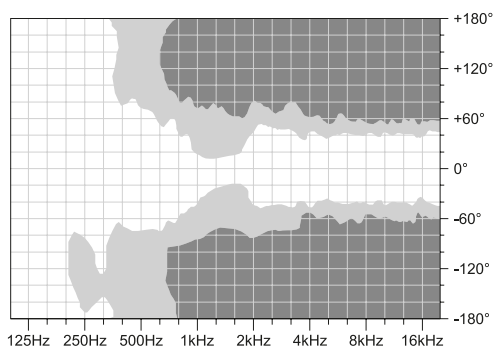
M12i
upright setup



90° × 60°

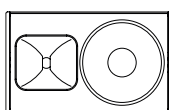


isobar diagram vertical

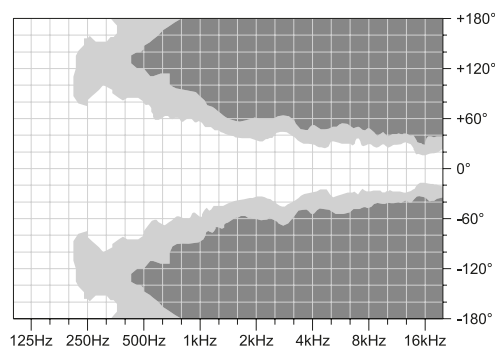


isobar diagram horizontal

M12i
horizontal setup,
horn rotated



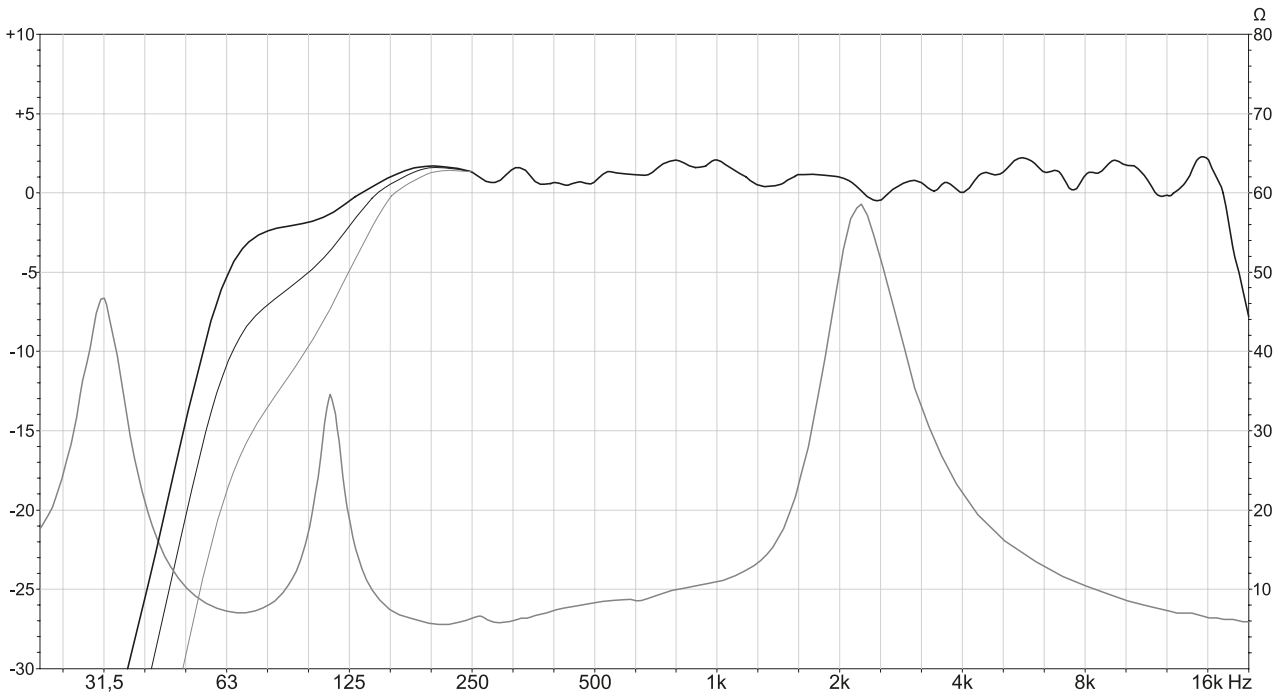
90° × 60°



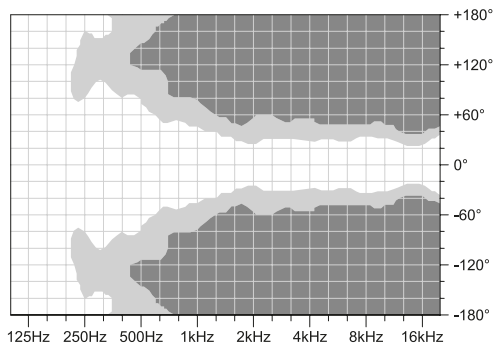
isobar diagram vertical

Frequency response **FULL** | FLAT | CUT

IMPEDANCE

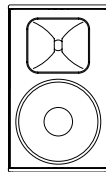


Isobar diagrams **-6dB** | **-12dB**

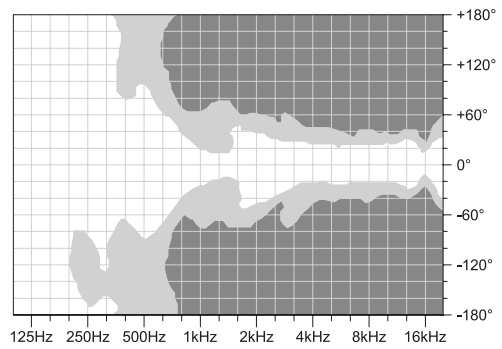


isobar diagram horizontal

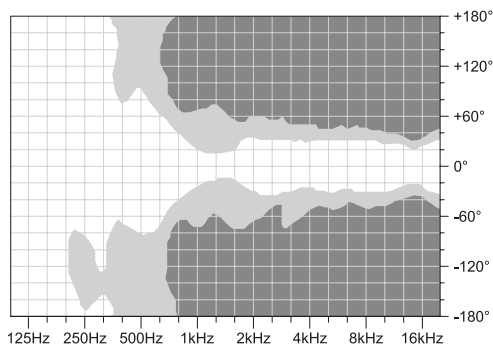
M12i
upright setup



65° × 45°

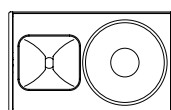


isobar diagram vertical

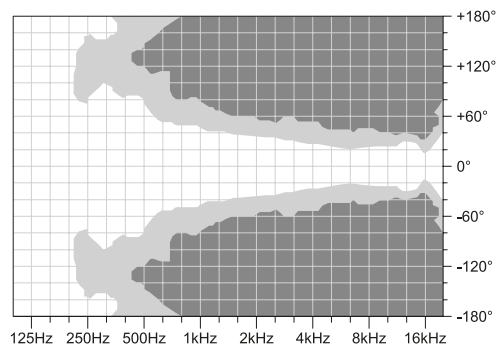


isobar diagram horizontal

M12i
horizontal setup,
horn rotated

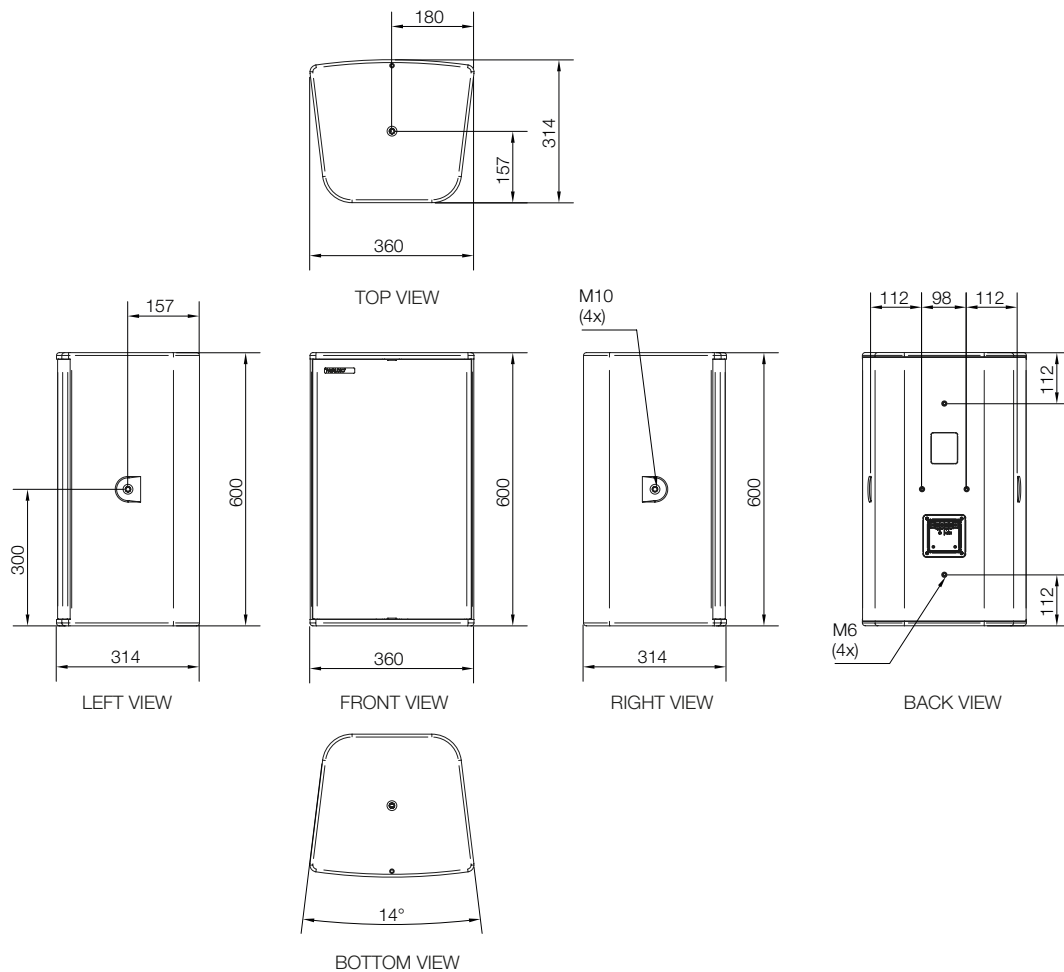


65° × 45°



isobar diagram vertical

Technical Drawing



Tender specification

The loudspeaker shall be of a symmetric trapezoid top type design, allowing front of house, delay and fill usage. It shall be a passive two way, small sized bass-reflex loudspeaker, able to be used in floor positioned, pole mounted or flown configurations. Its transducers shall consist of one 12-inch cone driver and one 1.4-inch exit high frequency compression driver, being connected to a exclusive, BEM method calculation based, rotatable 90 (h) × 60 (v) degree (M12i-90) or 60 (h) × 45 (v) degree (M12i-60) dispersion horn. Powerrating shall be: 700W program and 1400W peak.

The loudspeaker performance specifications shall be: Operating frequency range shall be 58Hz to 19000Hz. Nominal impedance shall be 8Ohms. Nominal sensitivity SPL shall be 101 dB at 1W/1m. Maximum peak SPL shall be 132dB at 1m.

The loudspeaker shall feature a passive, phase coherence and frequency response optimised x-over.

The loudspeaker shall be operated with a DSP amplifier, using dedicated presets, which all include further equalization, phase and limiting functions.

For convenience the loudspeaker shall additionally also be operational with a standard, linear amplifier without using a DSP. Connections shall be done with screw terminals as standard, for additional environment resistance a sealing PG type gland coverplate can be used. As alternative, a coverplate with speakON™ NLT4 connectors, the loudspeaker being connected to Pin1+/-, shall be available too. Through all options the loudspeaker shall be linkable.

All components shall be mounted in a internally braced trapezoid enclosure, featuring a bass-reflex design and being constructed of premium birch plywood with a black (as standard, other RAL colors as option) structured finish. For discreet appearance, no handles or rubber feet shall be fitted.

M10 threads on top, bottom and on both sides, as well as 4 × M6 threads at the back shall serve for mounting of additional rigging and brackets. Various rigging equipment shall be available, allowing the loudspeaker to be stacked, flown and angled in any possible configuration. The front protective grille shall be made of a perforated, non reflective powder coated and durable steel, backed by flame retardant, hydrophobic and acoustically transparent black fabric.

Dimensions shall be 360mm (14.17") in width, 600mm (23.62") in height and 314mm (12.36") in depth.

Weight shall be 19.2kg (42.32lbs).

The loudspeaker shall be the TWAUDIO M12i.

Manufacturer:
TWAUDIO GmbH
Osterholzallee 140-1
71636 Ludwigsburg, Germany
www.twaudio.com

TWAUDIO® GmbH

Osterholzallee 140-1
71636 Ludwigsburg
Germany

Tel.: +49 7141 488989-0
Fax: +49 7141 488989-99
Mail: info@twaudio.com