

Monacor SPH-5M

Monacor SPH-5M Hi-Fi Bass-Midrange Speaker

INSTRUCTION MANUAL

1. Introduction

The Monacor SPH-5M is a high-quality Hi-Fi bass-midrange speaker designed for exceptional audio reproduction. It features a robust construction and advanced acoustic properties, making it suitable for various speaker system designs.

Key Features:

- High-quality bass-midrange speaker designed for long excursion.
- Damped, low-resonance polypropylene cone for clear sound.
- Robust die-cast aluminum basket with an attractive design and 6-hole screw connection.
- Magnetic system with a drilled pole core and extended rear plate for optimized performance.
- Versatile for compact bass-reflex, TML, and closed speaker systems.
- Also suitable as a midrange speaker in 3-way speaker systems.



Figure 1: Monacor SPH-5M Hi-Fi Bass-Midrange Speaker. This image shows the speaker's black polypropylene cone, the surrounding rubber surround, and the sturdy die-cast aluminum frame with mounting holes. The rear terminals are also visible.

2. Setup and Installation

Proper installation is crucial for optimal performance and longevity of your SPH-5M speaker. Follow these guidelines:

1. **Enclosure Design:** The SPH-5M is designed for compact bass-reflex, TML (Transmission Line), and closed speaker enclosures. Ensure your enclosure design is appropriate for the speaker's parameters to achieve desired acoustic results.
2. **Mounting:** Secure the speaker firmly into the enclosure using the 6-hole screw connection points on the robust die-cast aluminum basket. Use appropriate screws that do not overtighten or damage the basket.
3. **Wiring:** Connect the speaker terminals to your amplifier or crossover network. Ensure correct polarity (+ to + and - to -) to avoid phase issues that can degrade sound quality. The speaker has an impedance of 8 Ohms.
4. **Amplifier Matching:** Use an amplifier capable of delivering sufficient power (up to 40 WRMS continuous, 80 WMAX peak) into an 8 Ohm load. Avoid underpowering or overpowering the speaker, as both can lead to damage.

3. Operation

To ensure the best performance and extend the life of your Monacor SPH-5M speaker, observe the following operational guidelines:

- **Initial Break-in:** Allow a break-in period of several hours of moderate listening before operating the speaker at high volumes. This allows the cone and surround materials to loosen and perform

optimally.

- **Volume Levels:** Operate the speaker within its specified power handling limits (40 WRMS / 80 WMAX). Avoid prolonged listening at excessively high volumes that cause audible distortion, as this can damage the voice coil.
- **Crossover Settings:** If using a crossover, ensure it is correctly configured for the SPH-5M's frequency response characteristics to prevent sending inappropriate frequencies to the driver.

4. Maintenance

The Monacor SPH-5M speaker requires minimal maintenance to ensure long-term performance:

- **Cleaning:** Gently wipe the cone and frame with a soft, dry cloth to remove dust. Avoid using harsh chemicals or excessive moisture.
- **Environmental Conditions:** Keep the speaker in a stable environment, away from direct sunlight, extreme temperatures, and high humidity.
- **Inspection:** Periodically inspect the cone, surround, and dust cap for any signs of damage or wear.

5. Troubleshooting

If you encounter issues with your SPH-5M speaker, consider the following common troubleshooting steps:

- **No Sound:**
 - Check all wiring connections from the amplifier to the speaker for secure contact and correct polarity.
 - Verify that the amplifier is powered on and functioning correctly.
 - Ensure the audio source is active and sending a signal.
- **Distorted Sound:**
 - Reduce the volume level; distortion often occurs when the amplifier or speaker is overdriven.
 - Check for loose connections or damaged speaker wires.
 - Inspect the speaker cone and surround for any physical damage.
 - Ensure the amplifier is not clipping (producing a distorted waveform).
- **Weak Bass or Midrange:**
 - Confirm correct speaker polarity; reversed polarity can cause bass cancellation.
 - Check crossover settings to ensure appropriate frequencies are being sent to the speaker.
 - Verify the enclosure is sealed properly (for closed designs) or that ports are unobstructed (for bass-reflex designs).

If problems persist after performing these checks, contact a qualified audio technician or Monacor customer support for further assistance.

6. Specifications

Feature	Specification
Brand	Monacor
Model Number	10.5530

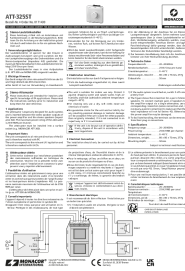

Feature	Specification
Power Handling (RMS)	40 Watts
Power Handling (Max)	80 Watts
Impedance	8 Ohm
Connectivity Technology	Auxiliary (Wired)
Mounting Type	Table Mount (typically within an enclosure)
Speaker Type	Woofer / Bass-Midrange
Recommended Uses	For television (as part of a home audio system)
Product Dimensions (L x W x H)	13 x 16 x 28 cm
Product Weight	190.51 grams
Waterproof	True (referring to cone material resistance)
Power Source	Electric Cable (via amplifier)


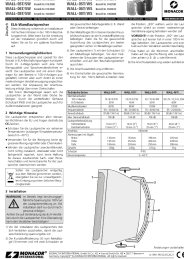


7. Warranty and Support

For warranty information, technical support, or service inquiries regarding your Monacor SPH-5M speaker, please refer to the documentation provided at the time of purchase or contact your retailer. You may also visit the official Monacor website for contact details and further resources.

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Related Documents - SPH-5M

	<p>MONACOR ATT-325ST Stereo Attenuator - Installation and Technical Guide</p> <p>This document provides installation instructions, application details, safety notes, and technical specifications for the MONACOR ATT-325ST Stereo Attenuator. Designed for professional audio systems, it offers 25W RMS per channel power handling and 4Ω impedance compatibility.</p>
	<p>MONACOR AR-30 & AR-50 Audio Exciters: Installation and Specifications</p> <p>This guide provides detailed instructions for installing and using the MONACOR AR-30 and AR-50 audio exciters. Learn about their features, technical specifications, and how to transform surfaces into speakers for a unique audio experience.</p>

	<p>MONACOR SL-250 SW/EN & SL-250 WS/EN PA Speaker Installation and Operation Manual</p> <p>This manual provides detailed instructions for installing and operating the MONACOR SL-250 SW/EN and SL-250 WS/EN PA speakers. It covers applications, important usage guidelines, step-by-step installation procedures, and comprehensive technical specifications, ensuring safe and effective deployment in PA and voice alarm systems.</p>
	<p>MONACOR WALL-T Series PA Wall Speakers - Installation Guide and Technical Specifications</p> <p>Detailed installation guide for MONACOR WALL-T series PA wall speakers (WALL-04T, WALL-05T, WALL-06T, WALL-08T). Covers applications, important notes, step-by-step installation, and technical data for 100V and 8Ω systems. Features weatherproof IP65 rating.</p>
	<p>MONACOR DMT-4010RMS Digitalmultimeter Bedienungsanleitung</p> <p>Umfassende Bedienungsanleitung für das MONACOR DMT-4010RMS Digitalmultimeter. Enthält Anleitungen zu Betrieb, Sicherheit, Messungen und technischen Spezifikationen für präzise elektrische Messungen.</p>
	<p>Monacor Spottune Omni-Track/SW 360° Wireless Speaker System</p> <p>Detailed information on the Monacor Spottune Omni-Track/SW, a wireless 360° speaker for high-voltage rail lighting systems. Features include plug-and-play installation, homogeneous sound radiation, and easy integration with the Spottune network audio streamer.</p>