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# HI-SOUND PROMOD STEREO - MONO

## PARABOLIC MICROPHONE

**PROfessional and MODular parabolic microphone**




**USER GUIDE**

**0.3**

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# Overview

**Hi Sound PROMOD – User Guide Introduction**

Welcome to the user guide for the **Hi Sound PROMOD**, a breakthrough in professional wildlife and field recording. Representing a new standard in acoustic engineering, the PROMOD combines exceptional sound capture with a highly adaptable, fully modular architecture designed to meet the rigorous demands of sound recordists, naturalists, and ornithologists.

While shotgun microphones provide directional pickup by blocking side noise, parabolic microphones far surpass them in signal amplification and background noise rejection. Traditional field recording often requires holding a parabola in one hand and a recorder in the other—making it cumbersome to manage, especially during film production. The Hi Sound PROMOD was specifically engineered to free your hands so you can concentrate fully on your shot and visual storytelling.

A Fully Modular Professional System

The core innovation of the Hi Sound PROMOD lies in its modularity. Rather than relying on fixed-purpose equipment, the system is built around a universal handle and a lightweight, 53 cm polycarbonate parabolic disc. Onto this foundation, you can easily attach either a dedicated stereo or mono microphone module. This component-based design allows you to instantly adapt your setup to any field recording scenario without needing an entirely new rig.

Acoustic Excellence & Audio Quality

Whether you choose the stereo or mono configuration, the microphone module is equipped with four high-performance, factory-calibrated AOM-5024 capsules:

- **Class-Leading SNR:** The four-capsule array delivers an outstanding Signal-to-Noise Ratio (SNR) of 80 dB with a self-noise of just 14 dB, ensuring pristine recordings even when capturing the faintest, near-inaudible sounds of nature.
- **Stereo Channel Balance:** Capsules are precision-matched in pairs to achieve optimal balance between the left and right channels.
- **Innovative Baffle Configuration:** The stereo module achieves highly accurate channel separation using a central baffle. By placing the capsules on the exact same plane as the baffle—rather than facing opposite directions—the PROMOD yields an additional signal gain of +6 dB without altering the high-frequency response.

- **Immunity to Interference:** Internal top and bottom shielding is tightly connected to the capsule grounds, maximizing resistance to external electromagnetic noise.
- **Immersive Spatial Audio:** Delivers true-to-life stereo separation, placing every sound accurately within its natural spatial environment.

Versatile Connectivity and the XLR PIP Innovation

Natively, both the mono and stereo microphone modules output via a standard 3.5mm stereo mini-jack. This provides immediate compatibility with camera microphone inputs, portable recorders, or smartphones (via a 3.5mm-to-USB converter) for running real-time bird identification apps.

For professionals utilizing high-end recorders with XLR inputs, the PROMOD ecosystem offers an innovative **XLR PIP Adapter**:

- **Very Low Power Technology:** Converts the native 3.5mm stereo jack output into a professional stereo XLR output while drawing minimal current from your recorder to optimize battery life and signal integrity.
- **Zero Battery Stress:** Operates entirely on low-voltage Plug-in Power (PIP) drawn directly from the recorder.
- **Clean Wiring Scheme:** PROMOD ➔ 3.5mm Jack Cable ➔ XLR PIP Converter ➔ XLR Cables ➔ Recorder.

Build Quality, Design & Accessories

- **Durable Polycarbonate Reflector:** Offers the perfect combination of strength, flexibility, acoustic clarity, and transparency.
- **Discreet Aesthetics:** Shape and color are optimized to keep the device virtually invisible in natural environments.
- **Essential Wind Protection:** Compatible with a custom windshield designed to drastically reduce wind interference in harsh environments (highly recommended).

Primary Applications

- **Wildlife & Bioacoustic Recording:** Ideal for high-sensitivity applications such as night migration bird monitoring.
- **Sporting Events:** Directional audio capture in noisy stadium environments.
- **Field Investigation & Surveillance:** Professional audio gathering and industrial acoustic monitoring.

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System Deployment Modes

1. **Camera-Mounted Mode:** Connect directly to your camera's microphone input via the 3.5mm stereo jack.
2. **Standalone / Tripod Mode:** Mount onto a standard tripod for static, unattended field recording.
3. **Smartphone / Real-Time Analysis Mode:** Attach a mobile device directly to the handle using a standard phone mount for live field analysis.

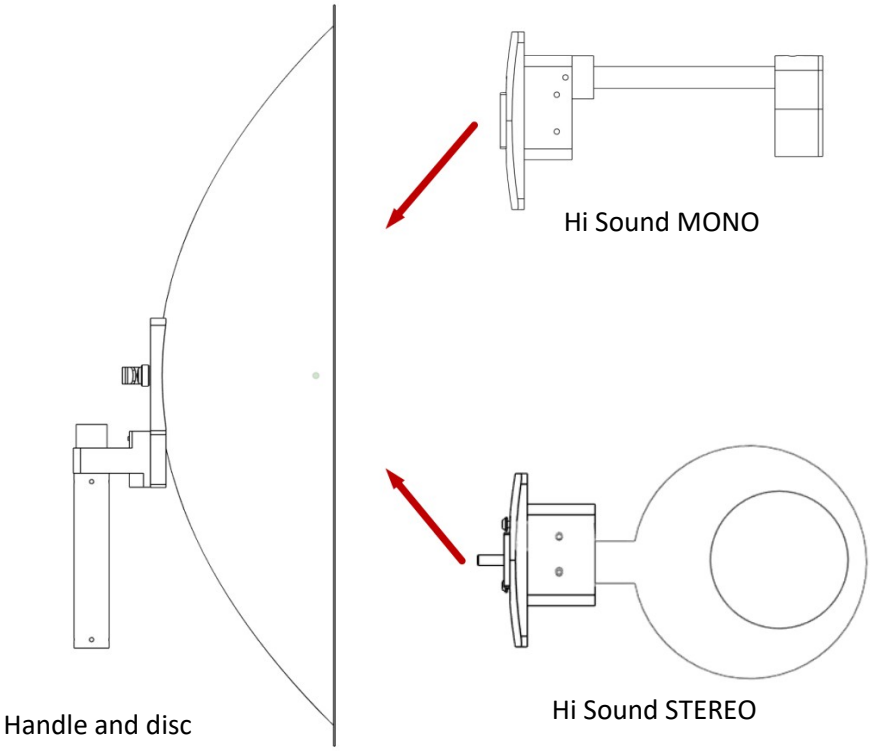
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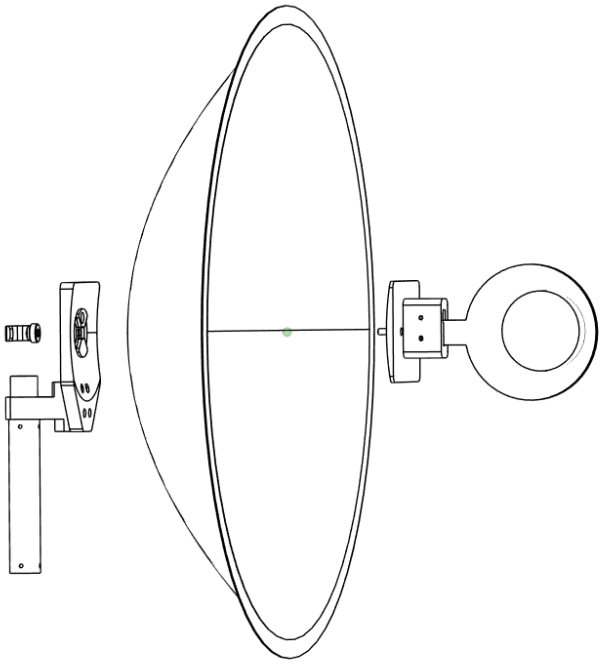
The Hi Sound PROMOD is a modular parabolic microphone system designed to adapt to different field recording setups and equipment.

## 1. Microphone Options

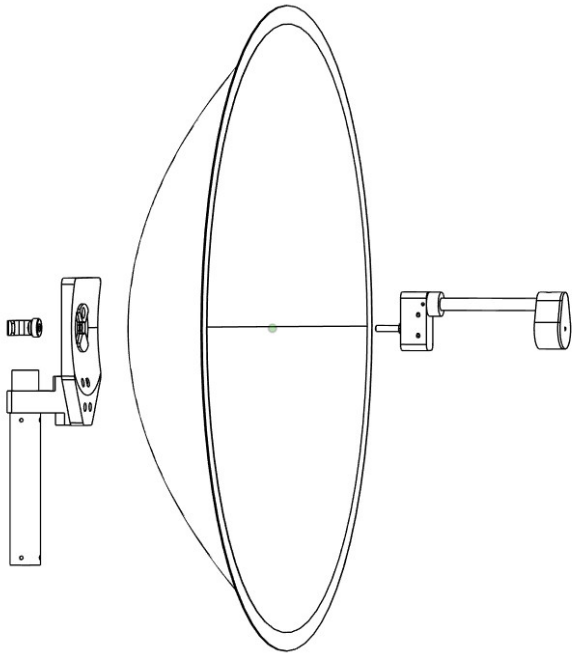
Starting from the core mechanical assembly consisting of the HANDLE and the PARABOLIC DISC - you can mount two different types of microphone capsules depending on your acoustic goals:

- **Mono Configuration**: Uses 4 capsuleS placed at the focal point of the dish to capture a highly directional, focused signal from a distant sound source.
- **Stereo Configuration:** Uses a dual-capsule per side (total 4 capsules) setup to capture spatial width and directionality alongside the parabolic gain.





*Hi Sound Stereo PROMOD*

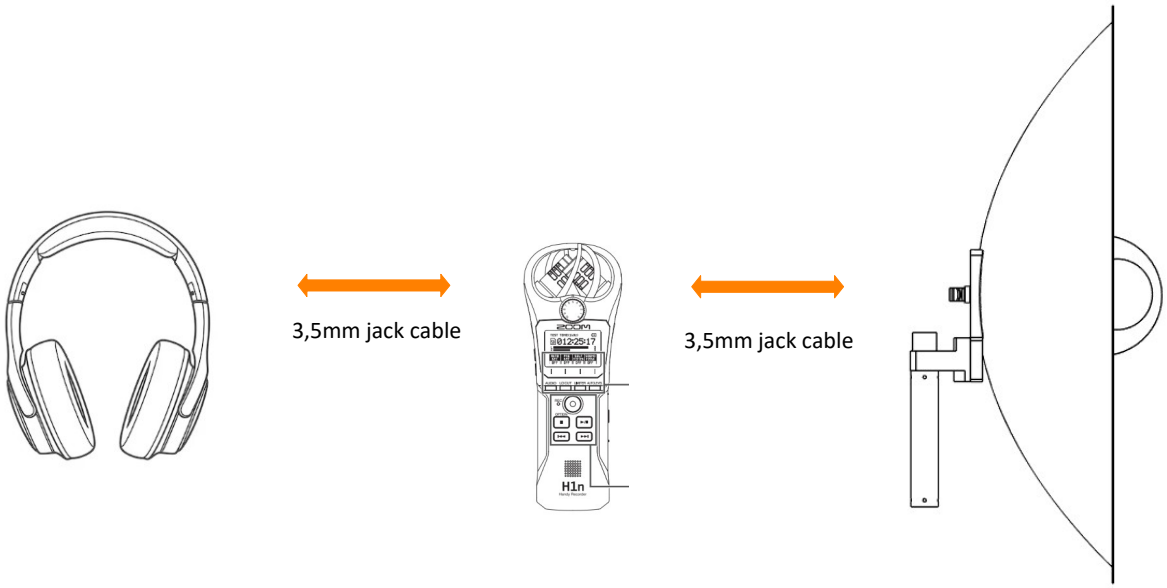


*Hi Sound Mono PROMOD*

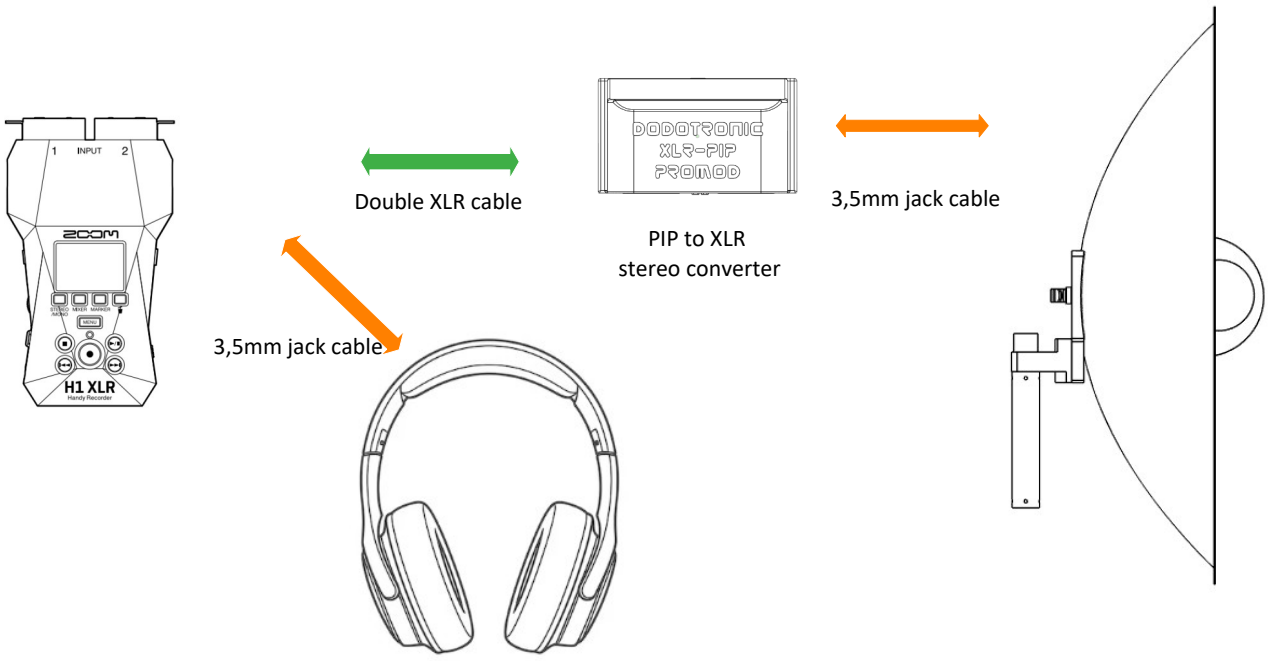
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## 2. Connectivity & Recording Setups

Once the handle, dish, and chosen microphone (stereo or mono) are assembled, the system can be routed to your monitoring headphones and recording device in three main ways:

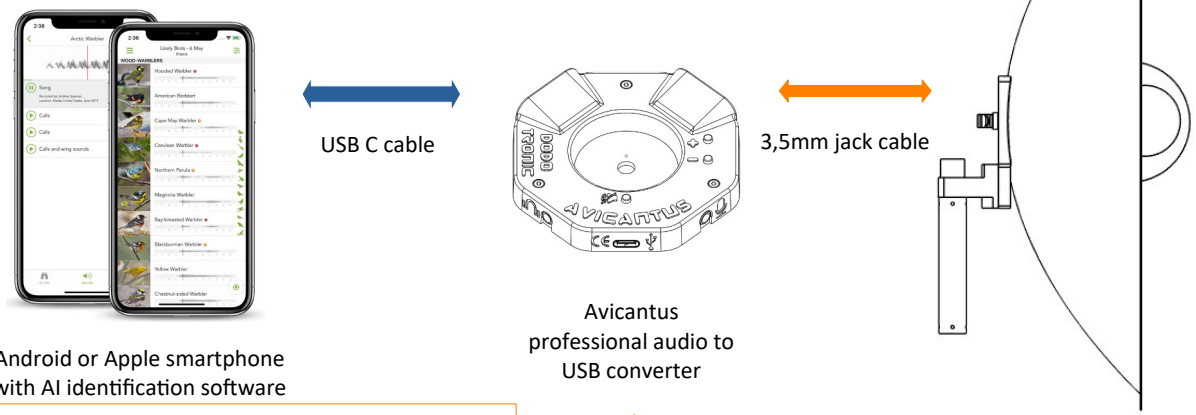


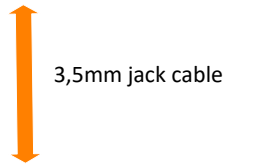

**Direct 3.5mm Connection:** The simplest and most portable configuration. The 3.5mm output from the PROMOD connects straight into the microphone input of a portable audio recorder, which supplies the required Plug-in Power (PIP) and handles headphone monitoring.

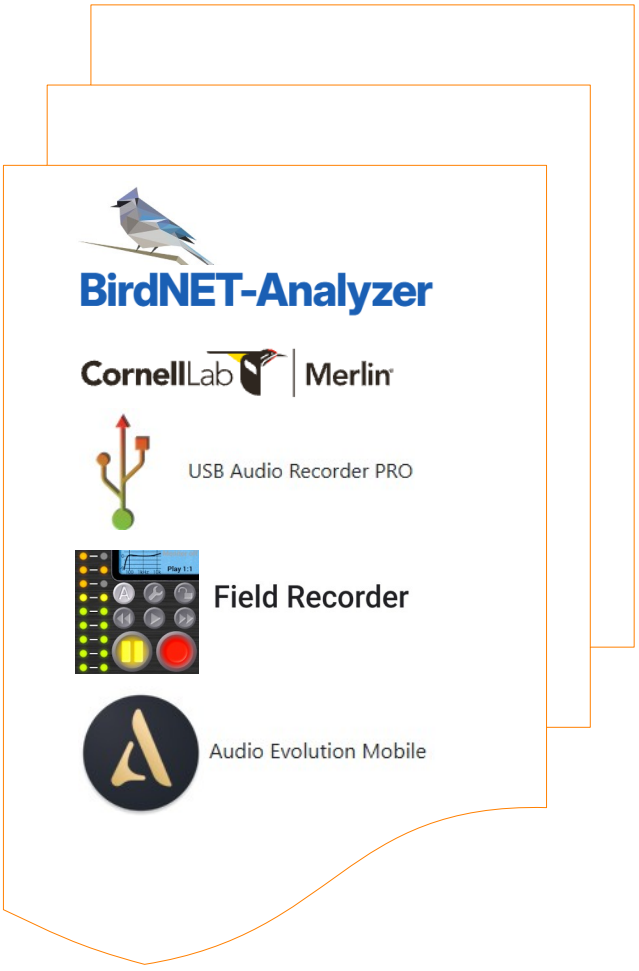



**Balanced XLR via PIP Converter**: Designed for pro-grade field recorders and preamps that rely on XLR inputs. The 3.5mm cable plugs into XLR PIP converter and then the signal is routed to the recorder and headphones.

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**Digital USB-C via Avicantus**: Turns the parabolic system into a plug-and-play digital USB microphone. The 3.5mm jack connects to the **Avicantus** audio converter, which digitizes the analog signal and sends it over a USB-C cable directly to a smartphone, tablet, or computer for app-based recording and headphone monitoring.
This is the **best professional system** for recording sounds, listening to them simultaneously, and identifying species using apps like BirdNET or Merlin.

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## Accessories



A range of accessories allows you to mount the recorder, XLR PIP converter, and phone directly onto the parabolic dish, enabling you to hold the entire setup with just one hand.



¼” screw



Windscreen for stereo and mono in mandatory for clean recordings outdoor



L-bracket




bicycle smartphone holder

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# Specifications

Outer diameter 53 cm

Focus depth 13 cm

Stereo module 195g

Mono module 133g

Handle 229g

XLR to PIP adapter 56g

Polycarbonate disc 274g

***Audio range (50Hz – 20KHz)***

**AOM-5024**

Sensor: AOM-5024 from http://www.primomic.com/

Sensitivity: -24 ±3dB @ 1kHz

Rated Voltage: 3V

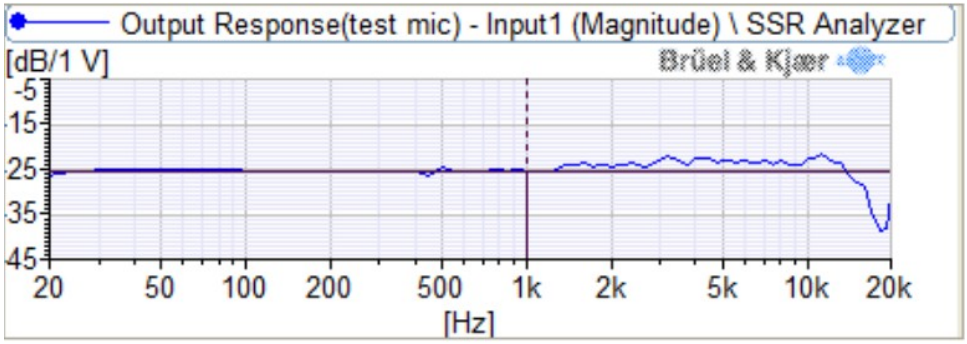
Output impedance @ 1kHz: 2,2 kΩ

Current consumption:(3VS with 2.2 kΩ RL) 500 μA

Signal-to-Noise Ratio:(1kHz, 94 dB input, A-weighted) 80 dB

Operating Voltage Range 1 ~ 10 VDC

Maximum SPL Input (THD<3%) 110 dB



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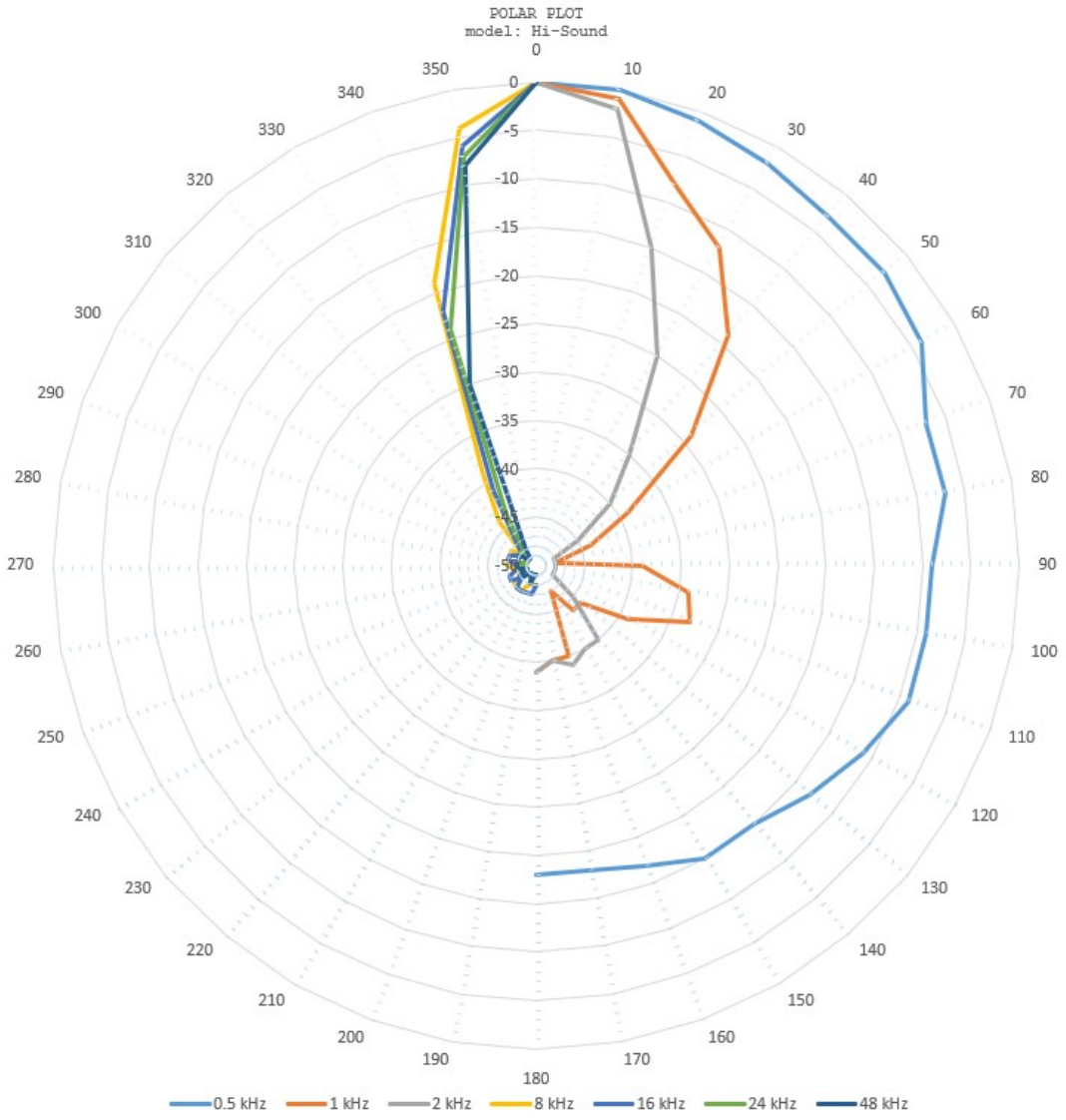
**Features:**

- 9.7mm diameter
- 5mm height
- -24 dB sensitivity
- 80 dB signal-to-noise ratio
- True 20 Hz to 20 kHz performance

## Specifications

| Parameters | Values | Units |
|---|---|---|
| Sensitivity (1 kHz @ 50cm)<br>0 dB=1V/Pa | -24 ±3 | dB |
| Rated Voltage | 3 | VDC |
| Output Impedance (@ 1 kHz) | 2.2 | kΩ |
| Current consumption<br>(3VS with 2.2 kΩ RL) | 500 | μA |
| Signal-to-Noise Ratio<br>(1kHz, 94 dB input, A-weighted) | 80 | dB |
| Decreasing Voltage (3VS to 2VS) | -3 | dB |
| Frequency Range | 20 ~ 20,000 | Hz |
| Operating Voltage Range | 1 ~ 10 | VDC |
| Maximum SPL Input (THD<3%) | 110 | dB |
| Directivity | Omni-directional | - |

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**Polar plot**

## Conformity declaration

model: Hi-Sound PROMOD

In conformity with the protection and compliance requirements of the following EC Directives:

- EN 55011
- EN 61326-1
- EN 61000-4-2
- EN 61000-4-3
- EN 61000-4-8

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# Technical assistance and support

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