

PHILIPS

SpeechMike Ambient Wearable AI Assistant

PSM5000 Series



Turn your speech into results

Transforming healthcare with ambient AI and speech recognition

The healthcare landscape is shifting, with clinicians facing growing administrative burdens, language barriers, and time pressure. The SpeechMike Ambient Wearable AI Assistant builds on the proven Philips SpeechMike family, now expanded for today's challenges: a next-generation, professional-grade dictation microphone that supports both ambient AI use cases and traditional speech recognition workflows. From transcription, clinical note generation, multilingual interpretation, hand-off note creation, and virtual assistant functions, the device is designed to optimize daily routines. By improving documentation, communication, and workflow efficiency, the SpeechMike Ambient helps professionals focus on high-value tasks, reduce administrative burden, and improve overall productivity.

Engineered for clear and reliable audio capture

- High-performance beamforming microphones ensure accurate speech recognition
- Specific audio modes for optimal performance across environments and use cases
- Patented ambient sound intelligence ensures natural, intelligible recordings

Designed for AI and speech recognition workflows

- Purpose-built for both AI-powered assistants and professional dictation solutions
- Secure, encrypted communication with enterprise-grade IT compliance
- Developer SDK for fast, native integration into custom software ecosystems

Built for mobility, comfort, and continuous use

- Compact, wearable design for seamless stationary, mobile, and hands-free use
- All-day power with simple, flexible charging
- Hygienic, low-maintenance design for safer handling and reduced operating costs

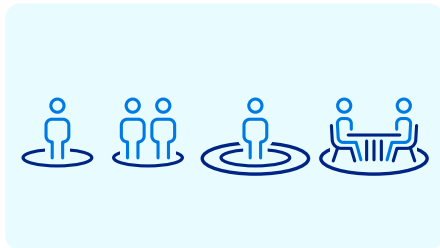
Highlights

Four-microphone array



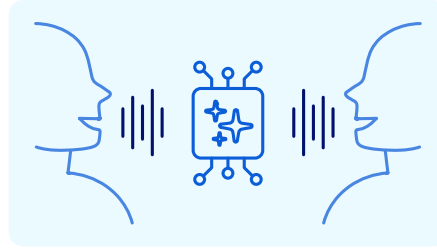
The SpeechMike Ambient features four high-performance beam-forming microphones for ambient recording. Its wearable design allows full mobility while keeping the microphones close to the speaker at all times, ensuring greater accuracy in dynamic, noisy environments such as offices, healthcare settings, courtrooms, or on-site locations—far outperforming smartphones or generic microphones.

Selectable audio modes



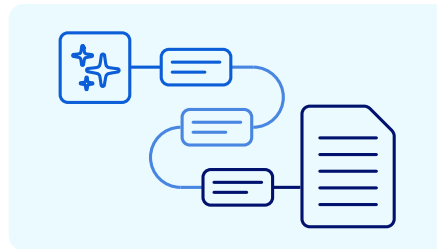
Different workflows call for different audio setups, and the SpeechMike Ambient is designed to meet those needs. Ambient Mode suits both conversation and single-speaker scenarios, preserving natural sound, while Dictation Mode focuses on the primary speaker and suppresses background voices. Two additional modes are available to integrators for speaker separation in conversation settings, ensuring maximum flexibility.

AI-powered audio processing



The built-in patented ambient sound intelligence detects and separates individual speakers when needed, creating clear and structured audio for conversations and meetings. At the same time, it enhances single speaker recordings by reducing background noise and suppressing other voices in the environment. This ensures clean and focused audio input and improves speech recognition accuracy. The result is consistently high quality audio for both ambient documentation and professional dictation.

Optimized for AI-driven workflows



The SpeechMike Ambient is engineered specifically to capture high-fidelity, single and multi-speaker audio in real-world environments—perfect for ambient AI scenarios (meetings, consultations, clinical notes) and dictation workflows (letters, reports, contracts).

Enterprise-grade security and compliance



The SpeechMike Ambient ensures secure data transmission with encrypted Bluetooth LE technology, and a secure “Passkey” pairing method. It avoids over-the-air pairing and allows only one active connection at a time to prevent unauthorized access, interference, and man-in-the-middle attacks. Tested for reliable coexistence with Bluetooth, Wi-Fi, and other 2.4 GHz devices, the system meets global standards like CE, FCC, and RCM.

Developer-ready for native integration



The SpeechMike Ambient is fully backwards compatible with existing SpeechMikes, ensuring seamless integration into current workflows while unlocking new opportunities. With its comprehensive software development kit (SDK) and API access, third-party software providers can natively integrate the device into desktop and mobile applications. With full control over button mapping, device settings, and audio input, the SDK enables rapid onboarding for speech recognition platforms, AI tools, and enterprise software ecosystems.

Highlights

Multiroom connectivity and flexible use



Designed for seamless transitions between mobile and stationary use, the device can be worn with a magnetic clip or neck strap for hands-free operation. It stores up to 10 wireless profiles, automatically connecting to the nearest workstation when moving between rooms or work areas, eliminating the need for manual pairing. The docking station enables charging and desktop recording, while the ergonomic, lightweight build with tactile feedback ensures comfort and durability for long shifts.

Hygienic and low-maintenance by design



Built with infection control in mind, the device uses hygienic, medical-grade materials and avoids the contamination risks common with handheld devices. Its smooth, polished surface resists germs and fingerprints while minimizing handling noise during operation for clearer audio capture. Compared to smartphones, it also lowers operational costs with fewer updates, simpler maintenance, and no need for mobile device management.

All-day battery



The energy-efficient design delivers up to 10 hours of continuous recording time, ensuring full-shift battery life in a lightweight body. Users can recharge quickly via the docking station, a standard USB-C cable, or a PC USB port. This ensures reliable uptime and supports the demands of mobile workflows.

Enhanced patient care

Ambient listening enables clinicians to stay fully engaged with patients without manual documentation or device handling. By capturing relevant information in the background, it allows for natural, uninterrupted conversations, fostering trust and improving care quality. This reduces cognitive distractions, ensuring a stronger clinician-patient relationship.

Designed for real-world healthcare environments



Emergency departments

Streamlines documentation during high-stress, fast-paced situations.



Inpatient rounds

Automatically generates comprehensive notes during ward rounds.



Outpatient clinics

Enhances patient interactions by reducing time spent on documentation.



Home care

Capture patient information during visits and dictate reports on the move.

Use cases with the Philips SpeechMike Ambient

Ambient documentation

Automatic transcription: capture and transcribe real-time audio during patient encounters.

Clinical note generation: convert transcriptions into structured notes, such as SOAP formats.

Hand-off notes: summarize patient information for seamless transitions between care providers.

Multilingual AI interpreting

Real-time translation: bridge linguistic gaps between providers and patients, enabling effective communication.

Care transitions: available to any caregiver throughout the continuum of care.

Capacity: no delayed care due to language barriers

Virtual assistant

On-demand information: answer clinical questions, retrieve guidelines, and receive drug references in real-time.

Task automation: schedule appointments, set reminders, and integrate with Electronic Health Records (EHR).

Dictation & speech recognition

Medical dictation: use dictation to create accurate reports, discharge summaries, and referral letters with speech recognition solutions.

Structured workflows: use voice commands to navigate, edit, and format documentation efficiently within clinical systems.

Evidence based benefits

Imagine healthcare workflows that are faster, smarter, and more connected. The Philips SpeechMike Ambient can help bring that vision to life.

Reduction in burnout

Administrative burdens are a primary driver of clinician burnout (National Academy of Medicine, 2019). Automating repetitive tasks helps reduce cognitive overload and allows clinicians to focus on patient care.

Improved clinical documentation accuracy and efficiency

Studies show that real-time transcription and automation reduce documentation time by up to 40% (sources: Smith et al., 2020; Jones et al., 2019).

Automated clinical notes have been demonstrated to improve accuracy and consistency in patient records (source: Patel et al., 2021).

Better hand-off and continuity of care

Effective hand-off notes are critical to patient safety. Research indicates that structured hand-off tools reduce communication errors by up to 30% (source: Joint Commission, 2020).

Enhanced communication across language barriers

Language interpretation services improve patient satisfaction scores and reduce medical errors, especially in diverse patient populations (source: Flores et al., 2018).

Multilingual capabilities ensure compliance with language access laws and guidelines (source: U.S. Dept. of Health and Human Services, 2020).

Cost savings and ROI

By improving efficiency, hospitals can save significant costs associated with documentation errors, delayed care, and clinician time, translating to higher revenue through improved billing and coding accuracy.

Specifications

Wireless connectivity

Wireless technology: 2.4 GHz Bluetooth Low Energy

Maximum power: $\leq 10\text{mW}$

Maximum range: up to 25 m / 82 ft (in clear view)

Audio recording

Microphone type: MEMS 4-way microphone array

Characteristic: omni-directional and beam forming

Frequency response: 200 – 8000 Hz

Sound

Speaker type: built-in rectangular, dynamic speaker

Acoustic frequency response: 300 – 8000 Hz

Speaker output power: $> 200\text{ mW}$

Power

Battery type: Li-polymer

Rechargeable: via docking station or USB-C power supply

Battery lifetime: up to 10 hours continuous talk time

Charging time: 3 hours

Product dimensions

Product dimensions (W x D x H): 32 x 104 x 15 mm / 1.3 x 4.1 x 0.6 in

Weight: 42 g / 1.5 oz

Wireless Adapter

Product dimensions (W x D x H): 14 x 7 x 42.5 mm / 0.6 x 0.3 x 1.7 in

Weight: 4 g / 0.1 oz

Docking Station

Product dimensions (W x D x H): 85 x 85 x 32 mm / 3.4 x 3.4 x 1.3 in

Weight: 140 g / 4.9 oz

USB-C: for charging and data connection

USB-C: for Wireless Adapter

Kensington lock

System requirements Philips SpeechControl Device and Application Control Software

Processor: Intel dual core or equivalent AMD processor, 1 GHz or faster processor

RAM: 2 GB (32 bit)/4 GB (64 bit)

Hard-disk space: 30 MB for SpeechControl software, 4.5 GB for Microsoft .NET Framework

Operating system: Windows 11, Windows 10 (64 bit)

Graphics: DirectX-compliant graphics card with hardware acceleration recommended

Sound: Windows-compatible sound device

Free USB-C port

Supported speech recognition software

Philips SpeechLive

Microsoft Dragon Copilot (Flex)

Microsoft Dragon Medical One

Microsoft Dragon Legal 16

Microsoft Dragon Professional 16

Solventum Fluency Direct

Solventum Fluency for Imaging

Dolbey Fusion Narrate powered by nVoq

Tandem Health

Green specifications

Compliant to 2011/65/EU (RoHS)

Lead-free soldered product

Operation conditions

Temperature: 5° – 45° C / 41° – 113° F

Humidity: 10 % – 90 %

Design and finishing

Material: high-class polymers

Color: dark grey pearl metallic / black



Models and accessories



PSM5000
Philips SpeechMike Ambient
Wearable AI Assistant
Microphone
Docking station
Wireless adapter
Mounting clip
Neck strap
USB cable

PSM5020
Philips SpeechMike Ambient
Wearable AI Assistant
Microphone
Mounting clip
Neck strap
USB cable

ACC5000
Philips SpeechMike Ambient
Docking Station
Docking station
USB cable

ACC5010
Philips SpeechMike Ambient
Mounting Clip

ACC5020
Philips SpeechMike Ambient
Neck Strap

ACC5100
Philips SpeechMike Ambient
Wireless Adapter

