## VMG-2 VOICE MASKING GENERATOR



## **ONE-CLICK VOICE PRIVACY**



#### Protect Flanking Paths in Doors, Vents, More

Conversations can easily escape though holes in the walls, gaps beneath or around the doors, through vents, and even through gaps in the electrical outlets and ductwork. Doors are typically the number one problem regarding acoustic security in an office. These flanking paths are the major contributor to acoustic security vulnerabilities. Doors, walls, and penetrations (e.g., ventilation) with poor acoustic attenuation properties allow others outside of the room to hear what's being said inside the room.

# Single-Point Acoustic Security for Sensitive Conversations

The newly redesigned VMG-2 is a portable, direct-field, multilayered speech generator designed to enhance speech privacy in fixed or mobile locations. The unit is designed for single-point, "at the perimeter" acoustical security for sensitive conversations spoken inside a room. Built for a variety of applications, the VMG-2 is perfect for addressing single-point vulnerabilities associated with flanking path vulnerabilities often found in hotel rooms, typical office spaces, and similar locations not otherwise designed to protect speech.







### Convenient

The new VMG-2 is a self-contained, battery-powered unit that can operate for up to 24 hours on a single charge using the internal rechargeable lithium-ion battery or can be permanently powered by using the supplied 5 V dc power supply. Simply turn on unit and place it against a wall or door. Audio generated through the speaker vibrates the structure, making it very difficult to discern between the conversation and the generated voice mask from outside the room. The VMG-2 can support a variety of external transducers to accommodate voice masking at large gaps, through ducts, etc.

### **Targets Voice**

Unlike other noise generators, the VMG specifically targets voice frequencies and speech characteristics. The VMG-2 contains 32 GB of on-board memory with factory-programmed audio composed of unsecure HVAC/ pink noise as well as much more secure audio consisting of multi-layered conversational voice masking. Using a proprietary approach to voice masking, Transformational Security layers multiple innocuous conversational audio sources containing a full spectrum of voice frequencies. When the sensitive conversation mixes with the voice mask, it becomes indecipherable.





## Reducing Intelligibility with Targeted Interference

When a person speaks inside a space, their voice may be overhead outside the room. The amount of sound lost or absorbed through the walls, doors, flanking paths, etc., can be measured and rated using Sound Transmission Class (STC) rating or Noise Isolation Class (NIC) methods. Low STC-rated doors and walls provide poor acoustical security, while high-rated doors and walls can provide significant sound security. Typical office spaces and hotel rooms achieve STC ratings in the lower 30s and, as most travelers know, are far from effective at containing conversations. Even purpose-built, high-security facilities, which target — but often miss — STC ratings of 55, are only able to attenuate normal, unamplified conversations within the room.

The alternative to physically blocking the conversation is to obscure it — make it unintelligible. Reducing the intelligibility of the conversation is key to maintaining speech privacy. When the VMG-2's Secure Mode is selected, complex, layered voice sounds are generated and mixed with the conversation that requires protection, thereby interfering with intelligibility. The VMG-2 design lends itself to filling open flanking path spaces (e.g., ventilation ducts, door gaps, etc.) with volumetric masking sounds and/or by directly coupling the voice masking sounds with structural components (e.g., walls, doors, conduits, windows, etc.).



▲ The VMG-2 can be paired with TSLLC's Heavy Emitter to put voice mask energy into structural elements like pipes, windows, and door frames.

In addition to several external volumetric speakers and heavy emitter transducers, multiple mounting options — temporary and permanent — are available for both the VMG-2 and emitters.

#### SELECT FEATURES

#### • Selectable Outputs:

- 4 W external speaker output
- Line out
- Internal speaker
- Easy to set up and simple to operate
- Press on/off power knob to retain last volume level
- Modes of Operation:
  - **Unsecure Mode:** HVAC noise for increasing local ambient noise
  - Secure Mode: Multi-layered speech mask
- Longer battery life via 3.7 V dc, 5000 mA rechargeable lithium-ion battery
- Greater than 24 hours at ½ level; 12 hours at full level using the rechargeable internal lithium-ion battery
- Continuous 24/7 operation using the supplied USB-C universal wall charger
- Supplied inductive charger for fast, convenient charging

#### SPECIFICATIONS

Case dimensions (in)	4.6 × 2.6 × 0.9
Weight	5.7 oz (162 g)
Audio frequency range	100 Hz - 15 kHz
Audio amplifier	WT8509 Waytronic IC with advanced AERC technology
Input voltage	5.0 V dc (3.1 A max)
Power (battery)	3.7 V, 5000 mA rechargeable lithium-ion battery
Power (external)	5 V dc USB-C universal pow- er supply (120 or 240 V ac)
Charging	Included power supply and charging pad
Battery life (typical)	Up to 24 h at half level Up to 12 h at full level
Output	4 W
Maximum SPL	98 dB at 4 ft
Fixed line out amplitude	1 V peak-to-peak (for use with amplified distributed speaker system)
Ports	USB-C (for charging and programming)
Operating temperature	-10 °C to +40 °C