

## VMA III.0 (Code 7526)

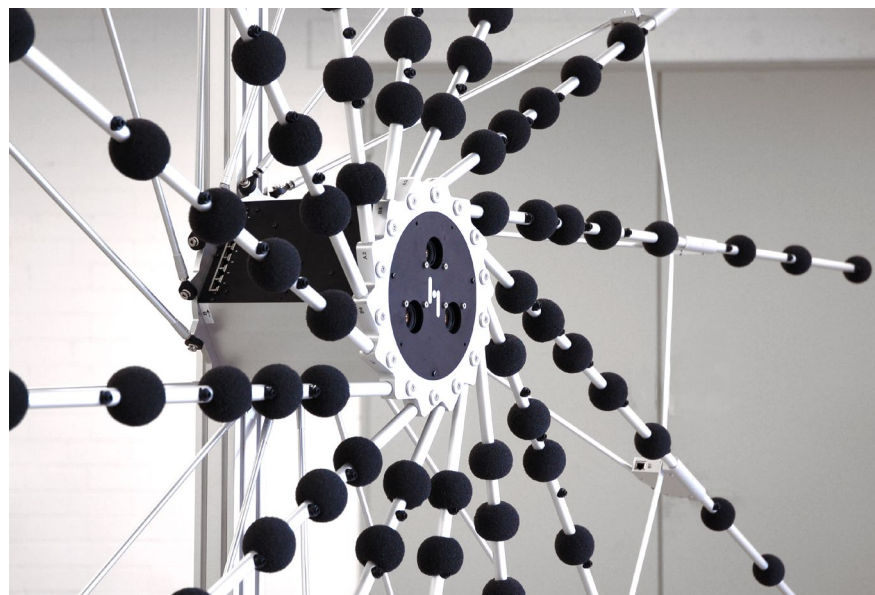
Array with 112 microphones, three cameras, and built-in front end

### Overview

VMA III.0 is an innovative microphone array from HEAD acoustics. Combined with the HEAD VISOR software, it is a perfectly matched system for real-time localization of sound sources.

The high-end functional design of the VMA III.0 makes it very easy to be installed on a wall or ceiling, so that it can be used e. g. for measurements in a wind tunnel.

As soon as the system is turned on, the HEAD VISOR software immediately delivers a video image with a synchronized graphical overlay showing a high-resolution map of the sound sources. This allows users to obtain the necessary information about the cause of interfering noise without any delay.



### Features

- High-quality HEAD VISOR microphone array for real-time localization of sound sources
- Source mapping (advanced algorithms from HEAD acoustics - depending on the sound field):
  - Dynamic range: up to 30 dB
  - Frequency range: 200 Hz to 20 kHz
  - Near-field frequency range: 20 Hz to 2 kHz

### Housing

- High-quality housing including:
  - 14 arms (112 microphones)
  - 3 cameras
  - front end

### Handling

- Only one network cable required for the PC connection
- Quick and safe mounting to a wall or ceiling
- Interactive working

### Source Mapping

- Distance between microphone array and sound source: 2 m to 200 m (1 ft to 650 ft)
- Microphone dynamic range: 100 dB
- Source mapping (standard beamforming):
  - Dynamic range: 10 dB
  - Frequency range: 200 Hz to 20 kHz

### MultipleEye Technology

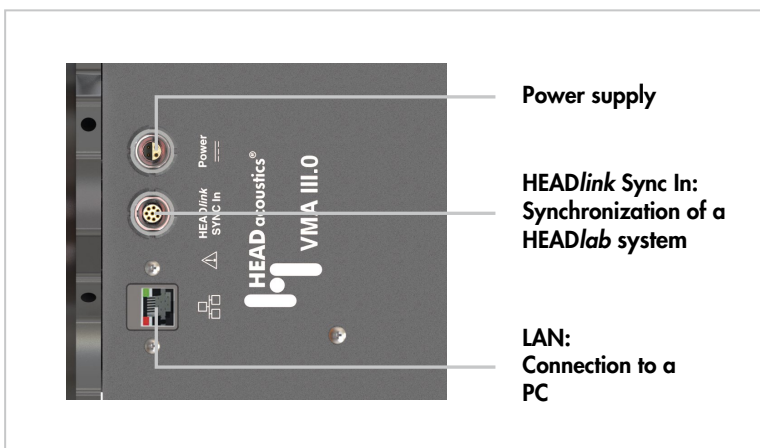
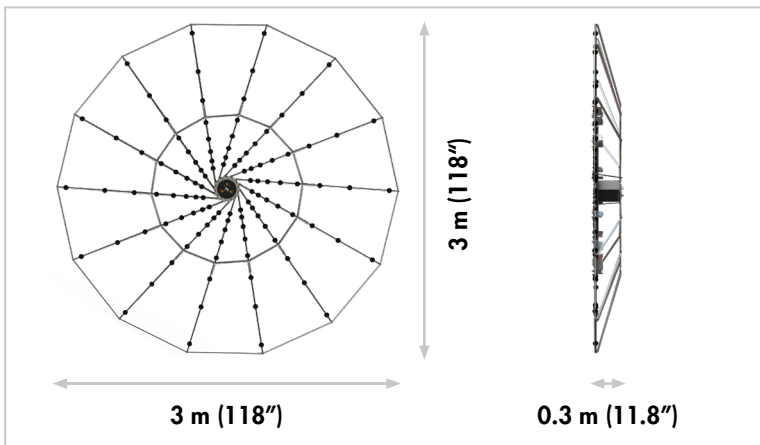
- Continuous, synchronous video image in real-time
- Precise distance measurement to all points in the image

### Connecting Additional Sensors

- Connection of sensors for additional reference and pulse channels via a synchronized HEADlab system (allowing the use of several different signal modules)
- Via a synchronized HEADlab system: Near-field probe from HEAD VISOR for analyzing of stationary low-frequency sound components (optional)

## Technical Data

Diameter (array):	approx. 3 m (118")
Max. power consumption:	approx. 45 W
Microphone capsules Number of microphones: Analog signal processing, S/N: Sampling rate: Bandwidth: Dynamic range (data acquisition):	112 > 100 dB(V) 48 kHz 20 kHz 30 dB to 130 dB
Industrial-grade cameras Number of cameras: Sampling rate:  Resolution:	3 23 Hz for the center camera and 6 Hz for the assistance cameras 656 x 494 pixels
Dimensions:	approx. 3 x 3 x 0.3 m (11.8") (WxHxD)
Weight:	approx. 15 kg (33 lb)
Operating temperature:	5 °C to 40 °C, non-condensing (41 °F to 104 °F)
Storage temperature:	-10 °C to 70 °C, non-condensing (14 °F to 158 °F)



## Scope of supply

- VMA III.0 (Code 7526)  
Array with 112 microphones, three cameras, and built-in front end
- Power supply
- CLL XII.10 (3795-10)  
LEMO extension cable for power supply, 10 m (393.7")
- Network cable, 10 m (393.7")
- 1/2" adapter for calibration of the VMA III.0 microphones via pistonphone

## Hardware extensions (optional)

- HEADlab-System (Code 3700ff)  
Modular multi-channel 24 bit front-end system from HEAD acoustic



- HEAD VISOR Probe (Code 7523)  
Near-field probe for the acquisition of low-frequency sound components (via a synchronized HEADlab system)



- labGIB (Code 3714)  
HEADlink booster for external power supply of connected HEADlab modules  
LEMO 8-pin (HEADlink) ↔ LEMO 8-pin (HEADlink) / LEMO 4-pin (external power supply)  
- labGIB is galvanically isolated
- labGIB-V1 (Code 3714-V1)  
HEADlink booster for external power supply of connected HEADlab modules and for passing a flat cable through a car door  
LEMO 8-pin (HEADlink) ↔ RJ45 (HEADlink) / LEMO 4-pin (external power supply)  
- labGIB-V1 is galvanically isolated  
- 2 labGIB-V1 boosters are required
- CLL X.xx (Code 3780-xx)  
Cable HEADlink  
LEMO 8-pin ↔ LEMO 8-pin