DODOTRONIC

ULTRAMIC

Ultrasonic USB microphones

USER GUIDE

3.3

The first fully digital ultrasonic USB audio class microphone.

Side view

Back view

USER GUIDE

Ultramics are ultrasound microphones, with an integrated digital to analog converter. It features a 192 KHz, 200 kHz & 250 KHz respectively sampling rate. The USB 2,0 Full speed port allows an easy connection to any PC or Mac computer. The device is recognized as a standard USB audio microphone, so **no driver installation is required!**
It appears as a single channel audio input device. However, if recording in stereo, the two channels will appear identical.

Microphone

The MEMS (Micro Electro-Mechanical Systems) microphone is very sensitive, with a good signal/noise ratio and small form factor.

Connections & settings

Connect Ultramic to your PC, iPhone, iPad, Android smartphone or tablet with a MINI USB cable, and it will immediately be recognized as a new audio input.
In your preferred sound recording software, select the new audio input, and choose the sampling frequency.

COMPATIBILITY LIST

	ULTRAMIC		
Operating system	**192K**	**200K**	**250K**
Windows 8	√	√ (1)	√ (1)
Windows Vista	√	√	√
Windows XP	√	√	NO
Windows 7	√	√	√
Linux Ubuntu	√	√	√
Linux Raspbian	√	√	√
Linux Android	√ (2)	√ (2)	√ (2)
Mac Os	√	√	√
iPhone - iPad	√ (1)	√ (1)	√ (1)

Note:

1 – Software compatible:

- Basic windows recorder
- Soundchaser
- GoldWave

2 – Please check the compatibility on www.dodotronic.com

Ultramic has been developed with the scientific support of:

CIBRA / University of Pavia.

Applications

It can be used by scientific researchers for:

- Detection and recording of biological ultrasounds for **bioacoustic studies** on insects, rodents and bats.
- Environmental studies to assess the impact of **wind farms** on bats.
- Recording and analyzing mouse ultrasonic vocalizations for **pharmacological studies**.

In industrial applications:

- LEAK detection
- Predictive motor fault monitoring
- Detection of the high-frequency noises emitted by switching power supply, by LCD screens, and also by the turbines of car and truck engines.

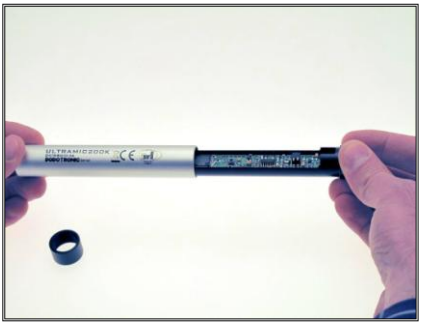
In your home or in office:

- Discover the ultrasonic noise emitted by your TV, your computers, and by the power adapters of all your electronic devices.
  Outside, use the UltraMic to record bat sounds! And discover the ultrasonic sounds of small rodents.

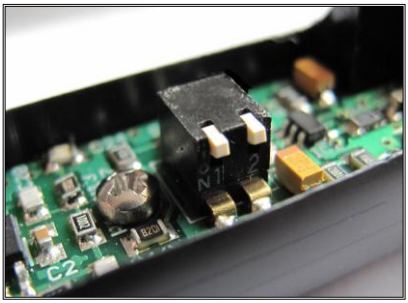
Amplification settings

Ultramic can be easily opened, via a screw on the back. The amplification can be changed acting on the integrated switches.

Unscrew the ring on the back of the device, near the USB connector.



Pull the aluminium tube.



Technical specifications

- 192 K sampling per second. ULTRAMIC192K.
- 200 K sampling per second. ULTRAMIC200K.
- 250 K sampling per second. ULTRAMIC250K.
- True 16 bit resolution.
- Frequency range up to 96 KHz - 100 KHz - 125 KHz respectively.
- MEMS high sensistivity Surface Mount Wide-band Ultrasonic Acoustic Sensor.
- High quality, and low noise analog amplification.
- USB device: Full speed port, with a mini USB B connector.
- 32 bit integrated microcontroller.
- Dimensions: 130 mm long x 20 mm in diameter.
- Weight 50 g.

Please keep in mind that ULTRAMIC250K doesn't run on Windows XP!

More information on www.dodotronic.com

Conformity declaration

Serial number:

year of manufacture: 2016

model: ULTRAMIC192K ☐

ULTRAMIC200K ☐

ULTRAMIC250K ☐

Ultramic is in conformity with the protection and compliance requirements of the following EC Directives:

- 2004/108/CE
- 2006/95/CE

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