

UAM-80

Ultrasonic Amplified Microphone

User's Guide



Notices

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Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

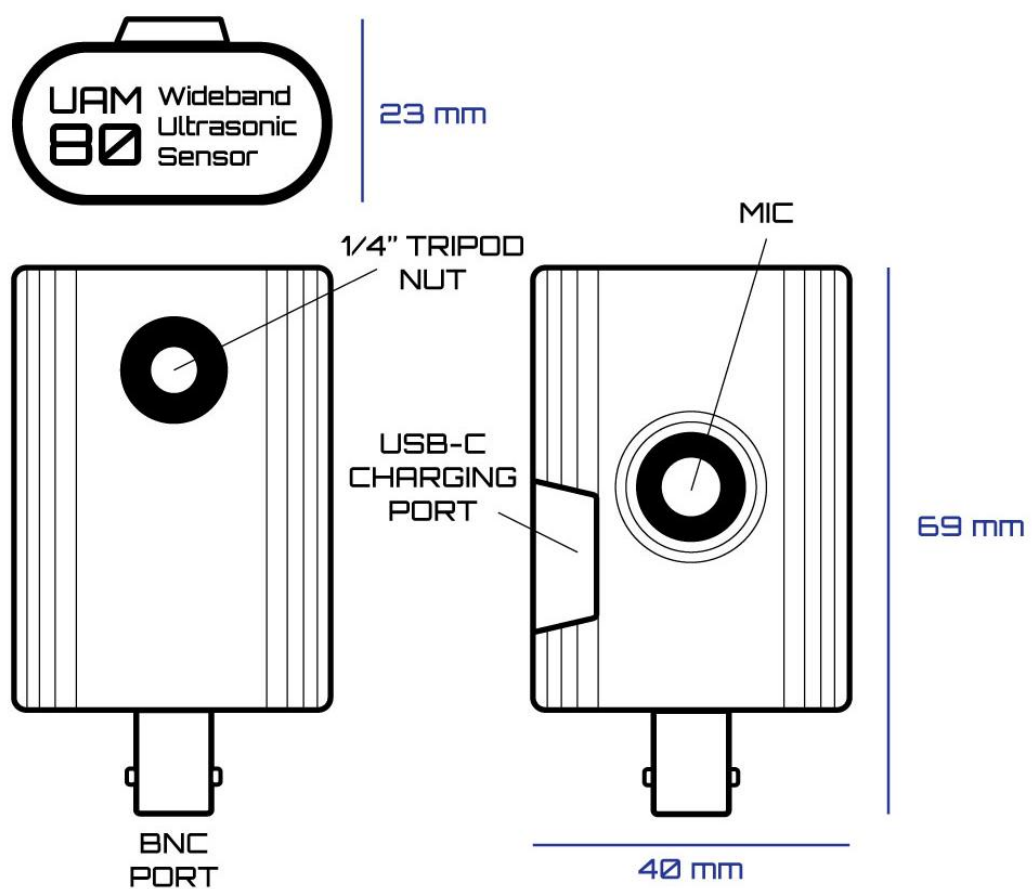
WARNING

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UAM-80 Ultrasonic Microphone - At a Glance

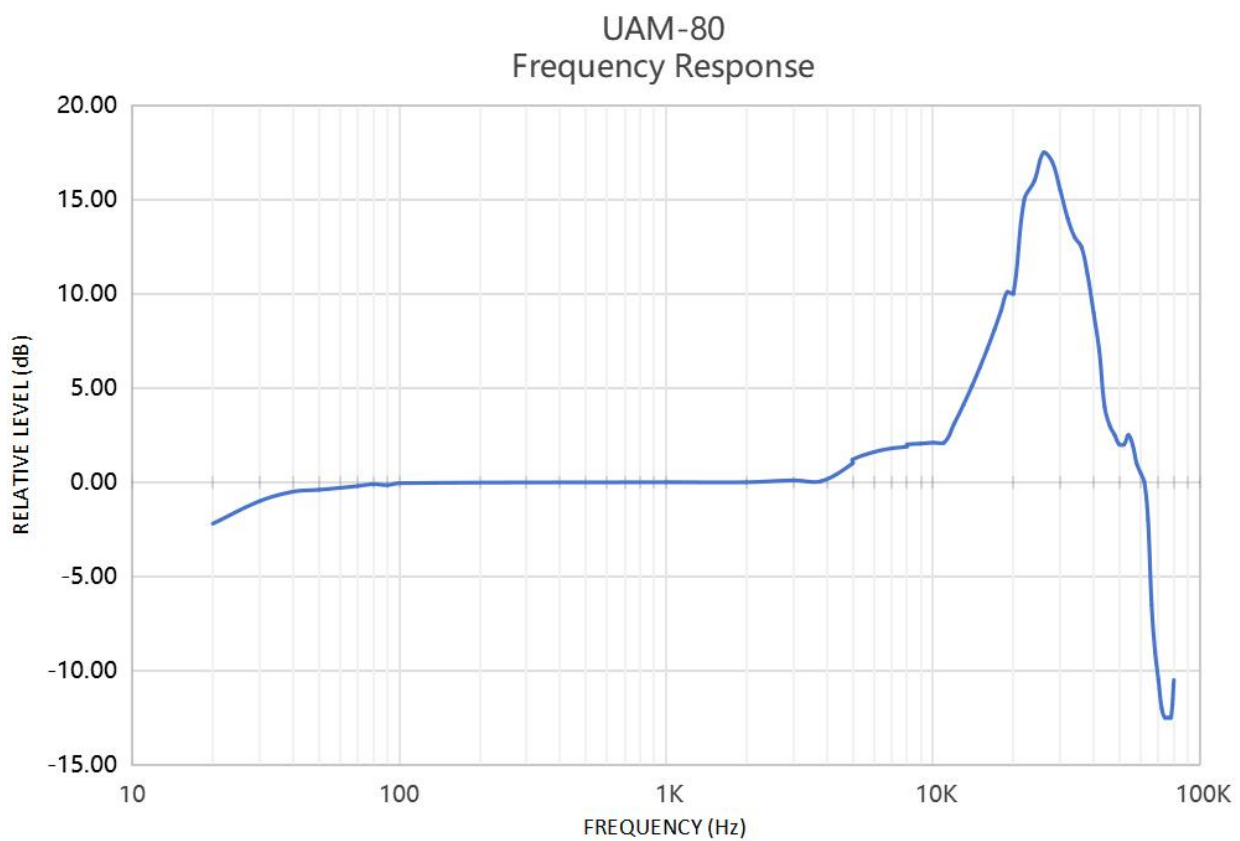
- Pre-amplified microphone
- Wide Bandwidth (from 20Hz to 80kHz)
- Standard BNC connector for oscilloscope's input
- Embed 1/4" Tripod nut for fixing
- Directly charge from phone for better portability*

*only in latest version where USB-C to USB-C cable is provided.



Indicated for	<ul style="list-style-type: none"> • Sound & Ultrasound source diagnosis • Testing of ultrasonic devices (i.e. including automotive parking sensors) • Environmental recordings
Operating Voltage	5V
Output Range	1mVpp - 3Vpp

Output Type	AC signal
Operating time	~1.5 hours
Charging time	2 minutes
Weight	80g
Dimensions	69mm(L) x 40mm(W) x 23mm(H)



This device needs an oscilloscope to perform testing and measures. Best usage with the HScope HS5x2 oscilloscopes.

For more information about HScope oscilloscopes, see:
www.martinloren.com/product/hs502_oscilloscope/

1 Getting Started

This chapter describes the steps you take when using the UAM-80 for the first time.

- Inspect the Package Contents
- Charge the UAM-80
- Connect the UAM-80 to the Oscilloscope

Inspect the Package Contents

Inspect the shipping container for damage.

If your shipping container appears to be damaged, keep the shipping container or cushioning material until you have inspected the contents of the shipment for completeness and have checked the material mechanically and electrically.

Verify that you received the following items and any optional accessories you may have ordered:

- x1** UAM-80
- x1** USB Type-C to Type-C charging cable (only available on latest hardware model)
- x1** Short BNC to BNC connector
- x1** BNC to BNC cable (30cm)



BNC Interface



BNC Oscilloscope Cable



USB Cable

Charge the UAM-80

Always charge the UAM-80 before each usage.

Charging Options

- **Option 1:** charge from a computer USB port or standard phone charger (USB cable not provided).
- **Option 2:** charge directly from phone with USB Type-C to Type-C short cable (option valid only if the short USB cable is provided with the UAM-80)

How to charge the UAM-80

- 1 Connect the provided short USB cable to your Android phone/tablet and the other side to the UAM-80.
If the short USB cable is not provided, connect the UAM-80 to a standard phone charger (Option 1).
- 2 Wait at least 2 minutes for full charge.
- 3 Disconnect the USB cable. The UAM-80 is ready to use.

CAUTION

Do not use fast USB chargers but standard 500mA-2A chargers.

Do not use portable phone chargers since they requires bigger loads to work.

Charging Option 1



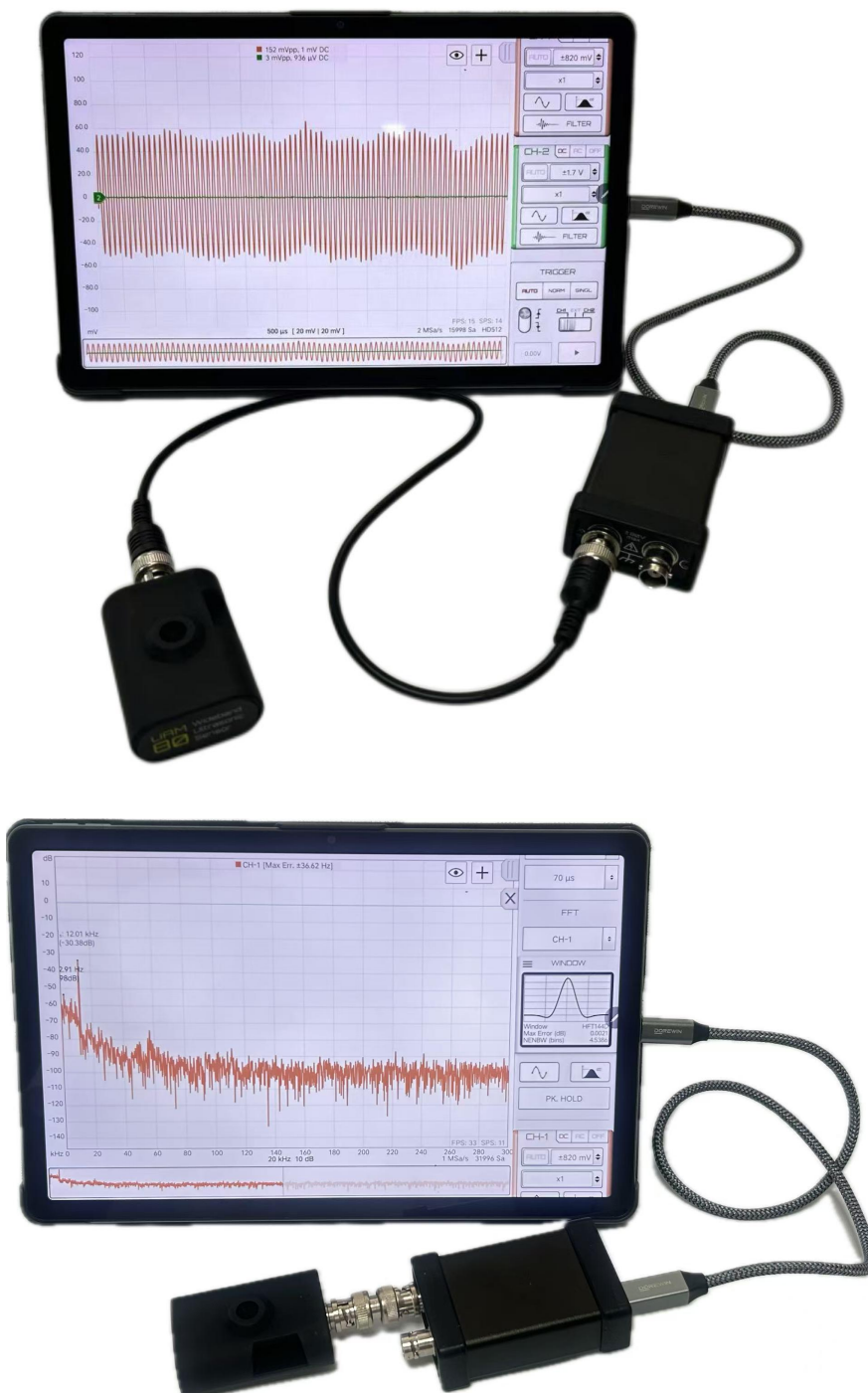
Charging Option 2

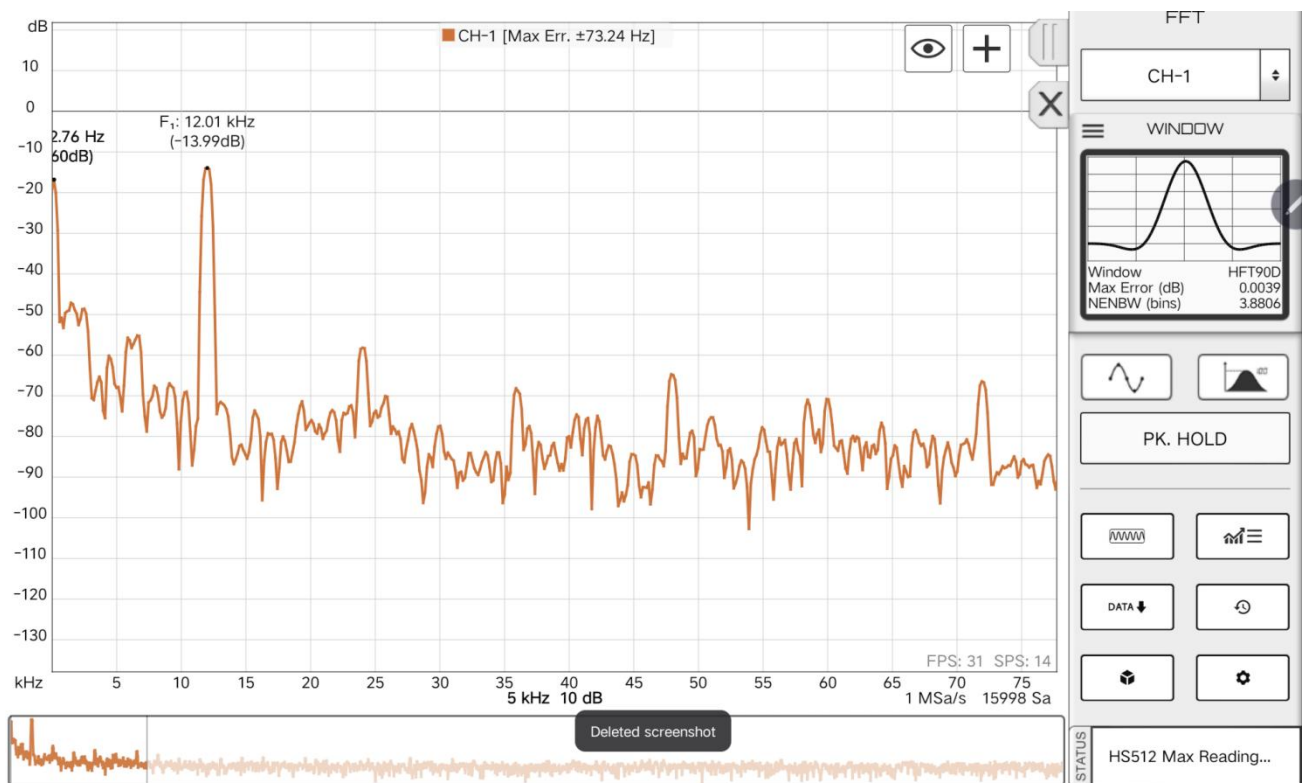
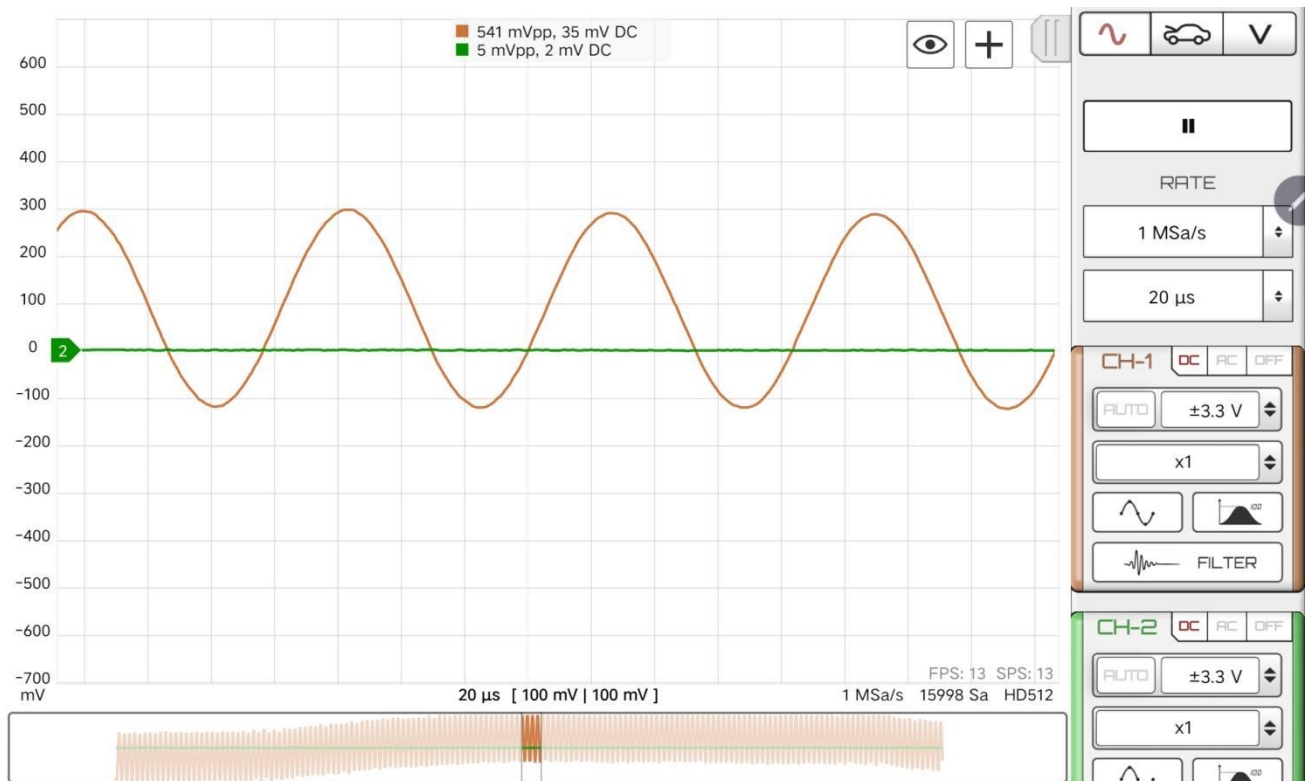


Connect the UAM-80 to the Oscilloscope

1. Connect the channel-1 of the oscilloscope the the UAM-80 BNC connector. Use the provided BNC cable or short connector;
2. Set the oscilloscope rate to the following indicative values:
 - Frequency mode (with **FFT**): **up to 160kSa/s** for visualize full bandwidth;
 - Time mode: **up to 320kSa/s** or more for oversampling;
3. Signal should be seen on the oscilloscope screen (you can test it with voice or with a sound generator).

Sample of setup in following pictures:





END OF CONTENT