

# Audio

## Buzzers, Microphones & Speakers

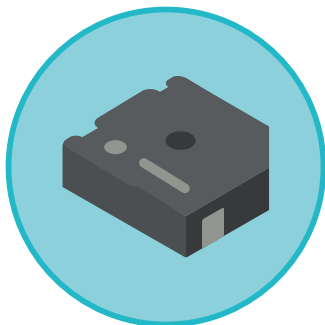
A product's ability to accurately take-in and clearly output audio signals is a vital part of its design. To ensure that your product finds its proper voice, we have developed a diverse range of compact buzzers, microphones, and speakers that minimize footprints and maximize reliability, making them the ideal audio solution for almost any application.

## Featured Tech ○ ○ ○ ○ ○



### Waterproof Audio Solutions

Designed to protect against moisture and other environmental contaminants, CUI Devices offers a range of buzzers, microphones, and speakers with Ingress Protection (IP) ratings, including IPX5, IP65, IPX7, IP57, IP67, IPX8, and IP68. With a variety of configurations, packages sizes, and performance specifications, our waterproof audio products give engineers additional flexibility when designing for industrial, outdoor, or any application where environmental factors may be a concern.



### Micro Audio Solutions

To address the continued miniaturization of electronic designs, CUI Devices carries a range of micro buzzers, microphones, and speakers in ultra-compact footprints. We offer buzzers with package sizes as small as 3.2 x 3.2 mm, microphones as small as 2.75 x 1.85 x 0.90 mm, and speakers as small as 10 x 10 mm, making them ideal for a variety of portable equipment, handheld devices, and space-constrained applications.

### Engineering Tools



#### Resource Library

Gain access to a wide range of videos, blogs, ebooks, webinars, and more to assist in your next design.



#### CAD Model Library

Save time and resources by utilizing our library of free, ready-made 3D models and PCB footprints to help you to streamline the design process.



#### Audio Calculators

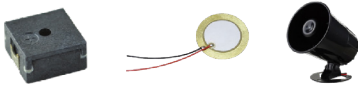
Use our buzzer and speaker SPL calculators as well as our speaker power calculator to quickly solve or convert a range of key audio specifications.

## Global Stock Availability

Our network of global distribution partners provides you with quick and easy access to thousands of our audio products, ready to ship same day across the globe.



# Audio Product Line



## Buzzers

### Piezo and Magnetic Technology

- Indicators, transducers, piezo elements & sirens
- Available with & without driving circuit
- Package sizes as small as 3.2 mm
- Profiles as low as 0.23 mm
- 65 to 115 dB sound pressure levels
- Numerous mounting styles
- 300 to 5,000 Hz rated frequencies
- Washable & wave solder compatible
- Waterproof models up to IP68
- IEC 60601-1-8 medical buzzers available
- Illuminated buzzer models available



## Microphones

### Electret Condenser and MEMS

- Omnidirectional, unidirectional & noise canceling directivity
- -54 to -24 dB sensitivities
- Sensitivity tolerances as low as 1 dB
- 55 to 72 dBA signal to noise ratios
- Packages as small as 2.75 x 1.85 x 0.95 mm
- Low current draw down to 80 A
- Terminal, pin, wire & surface mount termination types
- Reflow solder compatible models
- Operating frequencies up to 20,000 Hz
- Waterproof models up to IP67



## Speakers

### 10 to 205 mm Package Sizes

- Oval, rectangular, round & square frame shapes
- 72 to 135 dB sound pressure levels
- Variety of cone types
- 2 to 84 mm heights
- Alnico, Ferrite, Nd-Fe-B & Sm2Co17 magnets
- Numerous mounting styles
- 50 to 3,000 Hz resonance frequencies
- Enclosed speaker models
- Waterproof models up to IP67 and IPX8
- IEC 60601-1-8 medical speakers available

## CUSTOM CAPABILITIES

### Mechanical Modifications

- Custom size & height profiles
- Modified mounting styles
- Alternate materials for housing, pins & plating

### Electrical Adjustments

- Voltage
- SPL
- Frequency
- Current consumption

### Additional Modifications

- Washable stickers over sound holes
- IP ratings
- Operating/storage temperature ranges

### Mechanical Modifications

- Custom wires & connectors
- Alternate materials

### Electrical Adjustments

- Operating voltage
- Sensitivity rating
- SNR rating
- Impedance
- Current consumption

### Additional Modifications

- Washable stickers over sound holes
- IP ratings
- Operating/storage temperature ranges

### Mechanical Modifications

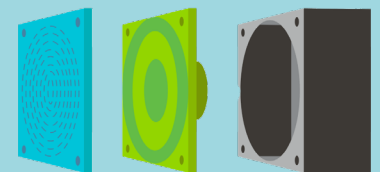
- Custom size & height profiles
- Custom wires & connectors
- Alternate materials for cone, magnet & plastics

### Electrical Adjustments

- Input power
- Voltage
- SPL
- Frequency
- Current consumption
- Impedance

## Audio Design Services

CUI Devices' industry-leading audio design services employ advanced simulation tools and testing as well as decades of expertise to help you optimize a range of audio parameters to your specific system needs. Our services and capabilities include audio simulation, product customizations and integrations, audio consulting, and audio testing and validation.



6405 SW Rosewood St, Ste C  
Lake Oswego, Oregon 97035  
1-877-323-3576  
[www.cuidevices.com](http://www.cuidevices.com)

© 2024 CUI Devices. All Rights Reserved. CUI Devices reserves the right to make changes to the product at any time without notice. Information provided by CUI Devices is believed to be accurate and reliable. However, no responsibility is assumed by CUI Devices for its use, nor for any infringements of patents or other rights of third parties which may result from its use.