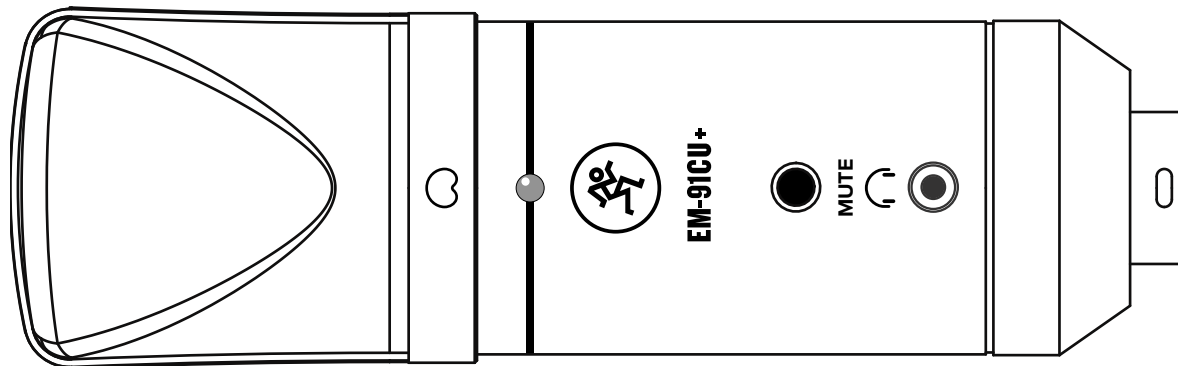




**EM-91CU+**

USB Condenser Microphone



**OWNER'S MANUAL**



**[www.mackie.com](http://www.mackie.com)**

## IMPORTANT SAFETY INSTRUCTIONS

1. Read, follow, and keep these instructions. Heed all warnings.
2. Do not expose the microphone to extreme cold or heat.
3. Do not expose the microphone to rain, use it in water, or in damp or wet conditions.
4. Do not expose the microphone to any excessive dust and other foreign particles.
5. Keep the microphone clean by washing outside with a dry cloth.
6. Keep the microphone in the case when not in use.
7. Never attempt to disassemble the microphone.
8. Mackie cannot be held responsible for any damage caused by improper use or modifications of the microphone.

9. Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the chart.

According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss:

10. **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and the receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Changes or modifications to this device not expressly approved by LOUD Audio, LLC, could void the user's authority to operate the equipment under FCC rules.

Duration, per day in hours	Sound Level
8	90 dB
6	92 dB
4	95 dB
3	97 dB
2	100 dB
1.5	102 dB
1	105 dB
0.5	110 dB
0.25 or less	115 dB

## LIMITED WARRANTY Please keep your sales receipt in a safe place.

This Limited Product Warranty ("Product Warranty") is provided by LOUD Audio, LLC. ("LOUD") and is applicable to products purchased in the United States or Canada through a LOUD-authorized reseller or dealer. The Product Warranty will not extend to anyone other than the original purchaser of the product (hereinafter, "Customer," "you" or "your").

For products purchased outside the U.S. or Canada, please visit [www.mackie.com](http://www.mackie.com) to find contact information for your local distributor, and information on any warranty coverage provided by the distributor in your local market.

LOUD warrants to Customer that the product will be free from defects in materials and workmanship under normal use during the Warranty Period. If the product fails to conform to the warranty then LOUD or its authorized service representative will at its option, either repair or replace any such nonconforming product, provided that Customer gives notice of the noncompliance within the Warranty Period to the Company at: [www.mackie.com](http://www.mackie.com) or by calling LOUD technical support at 1.800.898.3211 (toll-free in the U.S. and Canada) during normal business hours Pacific Time, excluding weekends or LOUD holidays. Please retain the original dated sales receipt as evidence of the date of purchase. You will need it to obtain any warranty service.

For full terms and conditions, as well as the specific duration of the Warranty for this product, please visit [www.mackie.com](http://www.mackie.com).

The Product Warranty, together with your invoice or receipt, and the terms and conditions located at [www.mackie.com](http://www.mackie.com) constitutes the entire agreement, and supersedes any and all prior agreements between LOUD and Customer related to the subject matter hereof. No amendment, modification or waiver of any of the provisions of this Product Warranty will be valid unless set forth in a written instrument signed by the party to be bound thereby.



Correct disposal of this product: This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE directive (2012/19/EU) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.

## FEATURES

### EFFORTLESS SETUP, INCREDIBLE SOUND

- Great for content creation, live streaming, online meetings, and more
- Plug and play design, no drivers or software needed
- Standard USB connection
- Onboard Mute
- Headphone output

### PROFESSIONAL DESIGN INSIDE AND OUT

- Low-noise circuitry
- Studio-grade components
- Built-Like-a-Tank™ construction for years of reliability

### CARDIOID POLAR PATTERN

- Rejects peripheral noise to keep your recordings and streams crystal clear

### INCLUDED SOFTWARE

- Waveform™ OEM professional software and plugin packages included
- The DAW Essentials™ Bundle for Waveform OEM includes 16 powerful plugins like Equaliser, Compressor, Reverber8, and Limiter

### SAMPLE RATE: UP TO 16-BIT / 96KHZ

### INCLUDED ACCESSORIES

- Shock mount
- USB-B cable

## INTRODUCTION

The EM-91CU+ USB Condenser Microphone takes the great sound and build quality of the EM-91CU and adds even more useful features.

With an onboard Mute and headphone output, it is even easier to get the perfect take and get silent on the fly. And with up to 16-Bit / 96kHz recording quality, you can really step up your studio game.

Get recording fast with included Waveform™ professional software. With incredible sound and built-like-a-tank construction, the EM-91CU+ USB Condenser Microphone is ready to take your sound to the next level.

## SYSTEM REQUIREMENTS

### PC

**WINDOWS XP PRO, XP HOME, VISTA, 7, 8, 10**  
**USB 1.1 / 2.0 (64 MB RAM MINIMUM)**

### MAC

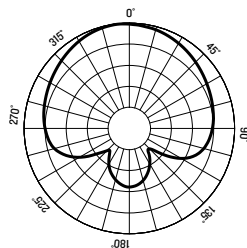
**MAC OSX (10.11 OR HIGHER)**  
**USB 1.1 / 2.0 (64 MB RAM MINIMUM)**



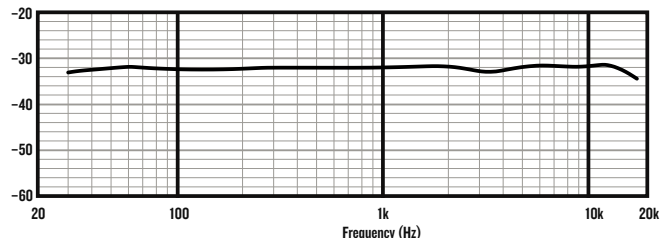
If you are experiencing a sample rate mismatch within a DAW, please make sure the sample rate on the operating system matches what's set in the DAW. Visit:

[mackie.com/en/products/microphones/em-series-usb-microphones](http://mackie.com/en/products/microphones/em-series-usb-microphones) for step-by-step instructions.

## SUPER-DIRECTIONAL @1 kHz



## FREQUENCY RESPONSE GRAPH





## FRONT AND BOTTOM PANELS

**1. USB-B Port** Connect the USB-B side of the included USB cable to the microphone and the USB-A side to the computer's USB port.

### 2. Phones Jack

Connect stereo headphones using an 1/8" connector.

**NOTE:** Your ears are important to us! Be careful of permanent hearing damage. Lower the volume on your device. Even intermediate levels may be painfully loud. Always turn the volume all the way down before connecting the headphones or doing anything new that may affect the headphone volume. Then turn it up slowly as you listen carefully.

### 3. Mute Switch

Mutes the mic signal.

### 4. Power and Mute LED

This LED illuminates green when connected to a powered computer and red when the mute switch is engaged.

## GETTING STARTED

1. Read and understand the Important Safety Instructions on page 4.
2. Connect the USB-B side of the included USB cable to the microphone and the USB-A side to the computer's USB port.

**NOTE:** Do not use a USB hub, keyboard's USB port, etc. Plug directly into an open USB port on the computer.

3. Computer setup instructions [plug-and-play, no drivers required!]:

**Mac:** System Preferences > Sound > Input (and Output) > EM-91CU+ Microphone

**PC:** Control Panel > Hardware and Sound > Sound > Playback (and Recording) > EM-91CU+ Microphone (make default). Make sure the input and output levels of the computer are un-muted and up.

4. Open up your favorite DAW and start a new session.
5. While most DAWs work (relatively) the same, the path to recording may be different. As such, refer to your DAW's manual on how to open new sessions, create tracks, select the USB microphone, arm tracks and the best part... recording! Have fun!

Technical Specifications	EM-91CU+
Element	14mm Black Electret Condenser
Polar Pattern	Uni-directional
Frequency Response	30 Hz – 18 kHz
Sensitivity	-32 dB ±2 dB (0 dB = 1 V/Pa @ 1 kHz)
Load Impedance	≥1000 Ω
Output Impedance	100 Ω ±30% (@ 1 kHz)
Max SPL	132 dB (@1 kHz ≤ 1% THD)
Equivalent Noise Level	16 dB A
Signal-to-Noise Ratio	78 dB
Sample Rate	16-Bit / 96 kHz or 24-Bit / 48 kHz
Size (H × W)	6.3" × 1.7" 160 × 44 mm
Weight	0.46 lb • 0.21 kg
All specifications subject to change	

## NEED HELP WITH THE MICROPHONE?

- Visit [www.mackie.com](http://www.mackie.com) and click Support to find: FAQs, manuals, and addendums.
- Telephone 1-800-898-3211 to speak with one of our splendid technical support chaps (Monday through Friday, normal business hours, Pacific Time).



## VORDER- UND UNTERSEITE

**1. USB-B Port** Verbinden Sie die USB-B Seite des mitgelieferten USB-Kabels mit dem Mikrofon und die USB-A Seite mit dem USB-Port des Computers.

**2. Phones-Buchse** Zum Anschließen von Stereokopfhörern über einen 3,5 mm-Stecker.

**HINWEIS:** Ihre Ohren sind uns wichtig! Verringern Sie die Lautstärke am Gerät, um dauerhafte Hörschäden zu vermeiden. Drehen Sie die Lautstärke immer ganz zurück, bevor Sie die Ohrhörer anschließen oder etwas Neues ausprobieren, das die Lautstärke beeinflussen könnte. Erhöhen Sie den Pegel dann langsam und vorsichtig.

**3. Mute-Taste** Die Mute-Taste schaltet das mic signal stumm.

**4. Power- und Mute-LED** Diese LED leuchtet grün, wenn das Mikrofon mit einem eingeschalteten Computer verbunden ist. Bei aktiviertem Mute-Schalter leuchtet sie rot.

## ERSTE SCHRITTE

1. Lesen und beachten Sie die „Wichtigen Sicherheitshinweise“ auf Seite 13.

2. Verbinden Sie die USB-B Seite des mitgelieferten USB-Kabels mit dem Mikrofon und die USB-A Seite mit dem USB-Port des Computers.

**HINWEIS:** Verwenden Sie keinen USB Hub oder den USB-Port der Tastatur etc. Schließen Sie das Kabel direkt an einen offenen USB-Port des Computers an.

3. Computer-Einrichtungsanleitung [Plug&Play, keine Treiber erforderlich!]:

**Mac:** Systemeinstellung > Sound > Eingabe (und Ausgabe) > EM-91CU+ Mikrofon

**PC:** Systemsteuerung > Hardware & Sound > Audiogeräte verwalten > Wiedergabe (und Aufnahme) > EM-91CU+ Mikrofon (zum Standardgerät machen).

Die Eingangs- und Ausgangspegel des Computers müssen aufgedreht und dürfen nicht stummgeschaltet sein.

4. Öffnen Sie Ihre bevorzugte DAW und starten Sie eine neue Session.

5. Obwohl die meisten DAWs (relativ) ähnlich funktionieren, können sich die Aufnahmewege unterscheiden. Wie man eine neue Session anlegt, Spuren erstellt, das Carbon wählt, Spuren aufnahmebereit schaltet und aufnimmt, wird im DAW-Handbuch beschrieben. Viel Spaß!

Technische Daten	EM-91CU+
Element	14 mm Schwarzer Elektret Kondensator
Richtcharakteristik	Uni-direktional
Frequenzgang	30 Hz – 18 kHz
Empfindlichkeit	-32 dB ±2 dB (0 dB = 1 V/Pa @ 1 kHz)
Lastimpedanz	≥1000 Ω
Impedanz	100 Ω ±30% (@ 1 kHz)
Max. Schalldruck	132 dB (@1 kHz ≤ 1% THD)
Eigenrauschen	16 dB A
Geräuschspannungsabstand	78 dB
Samplerate	16-Bit / 96 kHz oder 24-Bit / 48 kHz
Abmessungen (H × B)	6,3" × 1,7" 160 × 44 mm
Gewicht	0,46 lb • 0,21 kg
Technische Änderungen und Ergänzungen vorbehalten	

## SIE BRAUCHEN HILFE MIT DEM MIKROFON?

- Besuchen Sie auf [www.mackie.com](http://www.mackie.com) die Rubrik Support: Hier finden Sie FAQs, Handbücher und Ergänzungen.
- Unter der Telefonnummer 1-800-898-3211 erreichen Sie unseren technischen Support (Montag bis Freitag zu den üblichen Geschäftszeiten, Pacific Standard Time).



**[www.mackie.com](http://www.mackie.com)**



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