

Erika / Erika AI Wireless Microphone Quick Start / Setup Guide Firmware 2.4.25 15-July-2022

Erika enhances Audio for Online events. The Erika system employs Erika Microphones and the Erika Receiver.

Erika AI enhances Audio and Video for Online events. The Erika AI system employs Erika Microphones, the Erika AI Receiver, and the Erika AI Application (along with 1 to 4 external Cameras not included).

This Quick Start Guide is specifically for the Erika and Erika Al's Microphone + Receiver usage. There is a separate Quick Start Guide for the Erika Al Application usage.

Erika Microphone: Equipment:

- Erika Microphones (black) (rechargeable battery) (1 to 20 Microphones can communicate with a single Receiver).
- Erika Receiver or Erika AI Receiver (white), attached to computer via USB cable.
- Carrying case: use the carrying case to elevate the Receiver off of the table (for better wireless reception) by inverting carrying case (without the lid) and running USB cable up through the case .
- (Erika AI only) 1 to 4 external Cameras (UHD or HD) (max 2 UHD Cameras), attached to computer HDMI \rightarrow USB.
- Computer (PC) which meets minimum requirements and has Erika AI Application + an Online Event software program installed (Zoom, Teams, etc).
- *** (Erika AI only) Minimum PC Hardware Requirements:
- 1-2 Cameras: Intel Gen-12 Processor, 16 GB DDR5 Dual Channel RAM, GPU Nvidia RTX 3050.
- 3-4 Cameras: Intel Gen-12 Processor, 16 GB DDR5 Dual Channel RAM, GPU Nvidia RTX 3060.



Erika Microphone: Setup / Usage:

Erika Wireless Microphone provides clear Audio for Online participants that allows for mobility and convenience in a tiny package.

Erika Microphone can be used on a table top, or worn by participants.

If used on a table top:

- Position each magnet in front of where each participant will sit.
- Secure each magnet length-wise at the edge of the table by un-peeling the double-sided tape on the back of the magnet and pressing on to table.
- Suggested use is to place the magnets at least 3 feet apart from each other on the meeting table.
- Set each Microphone on it's magnet, Microphone number facing upward.
- Usage: If the Microphone is in the sideways up position, it is ready to use and will connect to it's Receiver (if the Receiver is powered). If the Microphone is in the face-down or face-up position, it is muted / dis-connected from the system.
- Suggested: always keep a Microphone attached to it's magnet (sideways up when using, face-down when not in use), unless the Microphone is being charged on a USB port.
- Participants should sit within a couple of feet from their designated Microphones.

If Microphone is worn: Attach Erika Microphone to the front of your shirt with magnet behind the shirt, with the Microphone positioned approximately 4 to 6 inches below your chin at the collar bone.

*** Note that using the Microphone on a table top has the distinct advantage over wearing a Microphone, that a participant will not inadvertently walk out of the room wearing an active mic. The table top fixed magnets also serve as placeholders which allow participants to align themselves more easily within the individual Extraction Windows of the Erika AI Application. (See the Erika AI Application Quick Start Guide.)

Attach Erika Receiver to a computer via USB. The Receiver will provide the audio from the Microphone(s) to the computer. Elevate the Receiver off of the table by inverting the carrying case (without the lid), running the USB cable upwards through the inverted carrying case, and attaching Receiver in the elevated position.

Erika Microphone is battery powered, with approximate 25 hour battery life. To charge Microphone: connect Microphone via USB to a USB power source. Typical time to a full charge is 1 to 3 hours. (The Erika AI Application has a battery life indicator for each Microphone, in the Audio tab.)

A participant's audio volume is automatically adjusted by the Microphone, based on how loudly or softly the person is speaking.



Multiple Microphones may be used with a single Receiver (up to 20 Mic's). With multiple Microphones, only 1 Microphone is active at a time (Microphone of the active speaker).

Erika is compatible with Online meeting and streaming software: Zoom, Microsoft Teams, OBS, etc.

Erika Wireless Microphone(s) and Erika AI Receiver is used in conjunction with Erika AI Application to provide Audio and Video enhancement for Online meetings or Live Streaming. See details about the Erika AI Application in the Application's Quick Start Guide. The Microphones and Erika AI Receiver will only work if the Erika AI Application is running on the computer.

Erika Microphone: Add-On Mic's:

The original Erika set you receive contains 2 Microphones and 1 Receiver, ready to use. You may purchase additional Microphones to use with the same Receiver. A single Receiver can communicate with up to 20 Microphones simultaneously. To add an additional Microphone to a Receiver set: you must go through the Pairing process in the Erika AI Application (1-time operation with 1st time use). From that point forward, the Microphone will connect with that particular Receiver only.

Erika Microphone: LED functions:

Receiver:

- red: not connected
- flashing red: not connected because Erika AI Application is not running (Erika AI Application is required to be running with Erika AI Receiver)
- solid green: connected to at least 1 Microphone
- intermittent green: connected but some audio is dropping (due to interference)
- (flashing purple: firmware mis-match with 1 or more Mic's nearby (Receiver and Mic's must have same firmware version))
- (flashing white: setup pairing function: ready to pair / add Mic)

Microphones:

- green (briefly, 1-second): new connection to Receiver
- yellow (briefly, 1-second): new connection to Receiver, but Mic's battery is below 25% remaining charge
- white (briefly, 1-second): this Mic is now the active talking Mic
- red (briefly, 1-second): Mic is self-muted (when Mic is turned face-down or face-up)
- flashing yellow: low battery (less than 10% remaining charge)
- flashing blue: charging (connected to power source via USB)
- solid blue: fully charged (connected to power source via USB)
- (flashing white: 1-time setup special pairing function: ready to pair to Receiver)



Erika Microphone: connecting / dis-connecting / power saving:

Mic automatically connects to it's designated paired Receiver, when they are in the same vicinity.

A Mic must be in a vertical or sideways up position to connect and stay connected to the Receiver.

If the Mic has gone to sleep, you may need to wiggle the Mic a bit to wake it up, before it will connect.

A Mic will not connect to any other Receiver but it's paired Receiver.

To dis-connect Mic from it's Receiver: perform any of the following:

- Move Mic far away from Receiver
- Place Mic face down or face up on a table note that either position puts Mic to sleep
- 30 minutes of silence will also automatically dis-connect all connected Mic's
- Un-plug Receiver from USB: dis-connects all Mic's

A dis-connected Mic that is left unmoved will put itself to light sleep (in the sideways up position) or deep sleep (in any other Mic position).

A dis-connected Mic that is being moved around will put itself to light sleep (but it will still attempt to re-connect to Receiver).

To wake / re-connect a sleeping Mic: turn the Mic to sideways up or vertical position, and shake Mic a bit, and the Mic should be in the vicinity of it's Receiver (and the Receiver is connected via USB to a computer).

Erika Microphone: Wireless connection / range: Best practices to minimize wireless interference:

- Microphone should be placed directly on table top or worn for best range and performance.
- Receiver should not be placed flat on a table, ideally it is raised off the table a bit. In general if possible, Receiver should be in direct line of sight to Microphone(s) and as high off the ground as possible.
- The closer a given Mic is to it's Receiver, the better the reception will be.
- Some wi-fi is in the 2.4 GHz band. If there is wi-fi in the building it could cause interference and hurt the range of the Microphone.
- Try to push wi-fi to 5 GHz band, or consolidate wi-fi to a single wi-fi channel (1,6, or 11).
- Bluetooth devices (such as bluetooth speakers) increase interference. Keep away such devices if possible.



- Erika Microphone(s) + Receiver sets will interfere with other Erika Microphones/Receiver sets in the same vicinity.

Try to keep some distance / walls between sets.

- Increase the power setting on the Erika if more range is needed. (This is done from the Erika AI Application.)

(A higher power setting for the Microphone uses more battery power.)

** Note that if the green light on Receiver is intermittent, that means that audio is being dropped, and so you may hear pops and gaps in the audio. This is an indication of too much interference, or too much distance from Mic to Receiver.

Erika Microphone: Multi-Mic switching: Best Practices:

Erika Microphones employ Auto-switching, which allows multi-Mic usage with a single Receiver. Only one Microphone is active at a time.

When using multiple Microphones with a single Receiver:

- Each Microphone should be placed directly on the table top in front of each participant or worn by each participant for best switching from 1 speaker to the next.
- Meeting participants should put a little distance between themselves for better switching (minimum 3 to 5 feet between participants).
- If 2 people talk at the same time the audio can momentarily sound a bit choppy. The system is best designed for 1 person talking at a time (because only 1 Mic is active at a time).
- Loud background noise will negatively impact switching. If possible, keep background noise to a reasonable minimum.
- Breathing on a Microphone can cause a switch to that Microphone. Participants ideally should sit up straight when wearing a Microphone, so as to avoid inadvertent switching due to breathing. Also, the Microphone should be worn just below the neck to minimize the risk of breathing on it.
- Outdoor environments can be challenging for switching, especially if there is much wind. In windy conditions, a wind guard should be placed on the Microphones.