Erika AI Wireless Microphone + Erika AI Application
FAQs

1. **What is Erika?**
   Erika provides high quality audio to a computer, from a small, light-weight, battery-powered, wearable microphone with no cables or wires attached to the microphone.
   The microphone communicates wirelessly with the receiver, which is attached to the computer via usb.
   Erika can support multiple microphones to 1 receiver (up to 20 microphones) .
   Erika can be used as the audio source for Online meetings or Live Streaming events.

2. **What is Erika AI?**
   Erika AI is an Online video enhancement that, in addition to providing excellent audio, also allows for video close-ups of Online participants, motion tracking, and automatic switching to the current speaker. This is accomplished with the Erika AI Microphones/Receiver + Erika AI PC Application. One to four external cameras are needed, which provide the video to the computer over HDMI → USB. The PC Application allows for window extractions of the video for close-ups of participants while they talk.

   Erika AI provides a Virtual Camera feed to Online Meeting / Live Streaming Tools such as Zoom, Microsoft Teams, and OBS. Within the Online Streaming Tool, select "Erika Virtual Camera" as your Video Source and "Erika Wireless Microphone" as your Audio Source.

   So usage is:

   External Camera(s) 4K or HD (Video) + Erika Wireless Microphones (Audio) —>
   Laptop: Erika Receiver (USB) —>
   Laptop: Erika AI Application (Video+Audio Enhancing) —>
   Laptop: Online Event/Streaming Application (Zoom, OBS, etc) : with "Erika Virtual Camera" selected as Video Source and "Erika Wireless Microphone" selected as Audio Source.

3. **What cameras are compatible with Erika AI?**
   Erika AI works with any HD or UHD camera that provides video to the computer for Online activities. For better quality, DSLR or SDI Cameras are recommended. DSLR and other HDMI Cameras require an HDMI → USB converter such as El Gato Cam Link. SDI Cameras require an SDI → USB converter.

4. **How many cameras can Erika AI Application support?**
   Erika AI can support 1 to 4 cameras (UHD or HD). Maximum 2 UHD Cameras.

5. **What are the minimum PC requirements for Erika AI Application?**
   1-2 Cameras: Windows 11, Intel Gen-12, Core I5, 16 GB DDR5 Dual Channel, 4800MHz, Dual-Bank, GPU Nvidia RTX 3050 w/ 4GB DDR6.
   3-4 Cameras: Windows 11, Intel Gen-12, Core I7, 16 GB DDR5 Dual Channel, 4800MHz, Dual-Bank, GPU Nvidia RTX 3060 w/ 6GB DDR6.
   Mac's are not supported at this time.

6. **What are Video Overlays?**
   Erika's Overlays allow for associating a name and title with each Online participant, which is shown during an Online event on the video screen when a particular person is speaking. This is also accomplished with the Erika AI Microphone/Receiver + PC Application. You provide the name and title for each participant, and then this information is displayed in the corner of the video during an Online event, when a given participant is speaking.

7. **Is Erika a single microphone or multiple microphones?**
   Erika can be used as a single microphone, or with multiple microphones simultaneously, interacting with a single receiver.

8. **If I have multiple microphones, with each participant wearing their own microphone, how does that work?**
   Only 1 mic is active at a time, the active mic is automatically selected based on who is speaking.

9. **With multiple microphones, what if multiple people are talking at the same time?**

The system analyzes the audio data from each microphone to decide the best microphone to assign as the current speaker at any given moment, as only 1 active mic is allowed at a time.

10. How do I charge the battery?
To charge a microphone: plug the USB port into any USB power source, including a powered computer. Microphone's led light will flash blue while charging, then solid blue when fully charged. The receiver does not need charging, it has no battery and operates when attached to a computer.

11. How do I monitor the battery levels?
The Erika AI Application provides battery level information for any microphones connected to a receiver, or for an individual microphone connected directly to the computer. Additionally if a microphone's battery gets very low (less than 2 hours operating time), it's led light will blink yellow.

12. How do I power a Mic on?
Shake / Twist a sleeping Microphone to wake it up.   Place Mic in a vertical or sideways up position to use.

13. How do I connect a Mic to it's Receiver?
Mic needs to be in a vertical or sideways up position, and in the same vicinity as it's Receiver, and both sides need to be awake / powered on. Then the Mic will automatically connect. A (brief) green or white led on the Mic will indicate connection.

14. How do I power a Mic off ?
To dis-connect Mic from it's Receiver and power the Mic off: perform any of the following:
- move Mic far away from Receiver
- place Mic face-down or face-up
- 30 minutes of silence will also automatically dis-connect all connected Mic's
- un-plug Receiver from USB: dis-connects all Mic's

15. How do I power a Receiver off / on?

The Erika Receiver is only powered and in operation when attached to a USB power source, attached to a computer.

16. **How do I mute the mic(s)?**
Turn the mic face-down or face-up. Led light will flash red briefly.
To un-mute: turn the mic back to vertical or sideways up position. Led light will flash green.
Mic's can also be individually muted / un-muted or all muted / un-muted from within the application.

17. **Is Erika a Bluetooth mic?**
No Erika operates in the same 2.4 GHz spectrum, but uses a proprietary protocol. Multi-mic support is not possible with Bluetooth.

18. **Does Erika need a bodypack?**
No, the Erika mic is an all-in-one design with built-in transmitter and small 25-hour battery. No body-pack or under-the-shirt wire is required.

19. **Can I use Erika with my iPhone?**
No.

20. **Does Erika support external (lavalier) mics?**
No, Erika has a high-quality built-in mic, eliminating the under-the-shirt wires associated with lav. mics.

21. **Does the wireless receiver need to be charged?**
No, the wireless receiver is USB powered, so there is no battery to charge.

22. **Is Erika waterproof?**
No

23. **Does Erika have an on/off switch?**
No, the Microphones go to sleep when not in use.

24. **When using multiple mic's, do I need an audio mixer?**
No, a separate audio mixer is not needed. With Erika there is only 1 active speaker at a time.

25. Is Erika compatible with OBS and/or Wirecast?
Yes, Erika in either single or multi-microphone configurations is compatible with OBS, Wirecast, and other live streaming applications.

26. Does Erika work with Zoom/Teams?
Yes, Erika in either single or multi-microphone configurations is compatible with Zoom, Teams, Meet, and other online conferencing applications.

27. Can Erika replace my speakerphone?
Yes, by placing the microphone on the speaker, audio quality is improved by reducing echos and attenuation caused by placing the microphone on a table. Erika allows users to stand up and present without needing to talk louder for the speakerphone to pick up the audio. Users can turn around to write on a board without loss of audio.

28. How does Erika avoid the noise and associated problems of multi-mics?
In a traditional multi-mic system, all microphones are mixed together, creating the opportunity for issues such as reverb, echos, and combing. These are caused by secondary microphones picking up delayed versions of the primary audio and mixing that into the system. Erika works differently by automatically selecting the primary speaker only and muting the secondary microphones using dynamic switching.

29. What is dynamic switching?
Dynamic switching monitors the audio information from all the connected microphones and uses patent pending technology to select the most appropriate microphone. Only the audio from the selected microphone is streamed over the USB. Secondary microphones are muted.

30. How many mics can Erika support?
Up to 20 Microphones are supported to 1 Receiver.

31. When used on a table top, how should a Microphone be positioned?
Secure the magnet to the edge of the table in front of a participant, place the Microphone on the magnet in a sideways up position when in use, and face-down

or face-up when not in use. (Face-down or face-up position will mute/power down the Microphone.)

32. How should Erika be worn?
    a. Vertically positioned.
    b. Center of chest area, 4 to 6 inches below your chin.
    c. Avoid placing the mic near pacemakers or any medical device affected by a magnetic field.

33. What is Spotlight?
Spotlight is a two second white LED flash on the microphone to indicate the selected microphone. It is useful in a number of situations including in a video conferencing meeting with multiple participants in one location. Spotlight can help the remote audience follow the speaker.

34. How long is the battery life?
The battery life is variable based on the Wireless Power setting that is set in the Erika AI app and how frequent a microphone is selected in dynamic switching. Typical battery life when the wireless power is set to 3 (default) is about 24 hours. At a setting of 5 for maximum range, the typical battery life is 8 hours.

35. How should I set the RF power level?
Set the power level based on the needed battery life. A higher wireless power setting reduces the chance of audio dropouts caused by wireless interference, but results in a lower battery life.

36. How can I add more mics?
Use the "Add Mic" function in the Erika AI Application. Place an (un-paired) Mic very close to the Receiver, the 2 will automatically pair with each other. This only needs to be performed once with a given Mic.

37. Can the firmware be updated?
Yes, using the Erika AI app for both Mac and PC. When updating firmware, both the receiver and all microphones must be updated.

38. How long does it take to charge the Erika mic? Can I overcharge?

It takes a maximum of about 3 hours to fully charge an Erika microphone. Erika uses a sophisticated battery charging algorithm to prevent over and under charge of the battery.

39. How can I optimize the wireless range?
   a. Raise the receiver up as high as possible. Do not place on floor.
   b. Avoid using USB 3.0 hubs
   c. Open line of sight from mic to receiver
   d. Raise up the receiver from the table, use a USB extension cable, if needed
   e. If human bodies or other obstructions are in the line-of-sight from mic to receiver, elevate the receiver or move it. You may use a USB extension cable.
   f. Move your WIFI to 5 GHz
   g. Reduce WIFI channel width to 20MHz
   h. Consolidate different WIFI access points/routers to a single channel
   i. Keep receiver away from WIFI access point / router
   j. Use the lowest acceptable range setting to maximize battery life and co-existence with other wireless devices. A setting of 5 in the Erika AI app is the highest range.

40. What is the maximum functioning distance from Mic to Receiver?
About 150 feet under ideal conditions.

41. Can the mic be sanitized?
Yes, use a moist sanitizing wipe to disinfect the mic, but avoid getting any liquid down the mic port hole or USB port.

42. Can I use Erika with a USB 3.0 hub?
USB 3.0 hubs are notorious for emitting noise in the 2.4GHz band. Plugging Erika(s) into USB 3.0 hubs may result in dropped audio packets. Use USB 2.0 hubs which are readily available and low-cost.

43. What is the audio sampling rate?
Erika samples the audio at 16 kHz 16-bit Uncompressed.

44. What is the audio latency?

Approximately 30 mS end to end, or less than one frame of video (at 25/30 fps). Most apps have AV sync adjustments to align the audio and video. Audio sync adjustments are standard in most video recording programs.

45.What is the warranty?

1 year. The warranty does not cover loss, abuse, water damage, or microphone damage. The microphone(s) and receiver must be returned to Convergent Design for warranty service.

46.How do I get support for Erika?

Email: cdsupport@convergent-design.com

47.Where is Erika manufactured?

Erika is assembled in the USA of imported parts.