

## ACTIVE NOISE CANCELING

Active noise canceling (ANC) has become a prominent need in today's office as people try and battle with the distraction of the open office. Anyone who travels on airplanes can relate, understanding the benefit that a pair of noise canceling headphones can provide to that long transatlantic flight—making going to sleep easier or just watching that movie more enjoyable.

### WHAT IS ANC?

ANC is a technology that uses additional microphones (either inside or outside of the ear cup) to pick up background noise and invert it by 180 degrees. The inverted noise cancels out the unwanted background noise leaving just the original audio the user wants to hear.

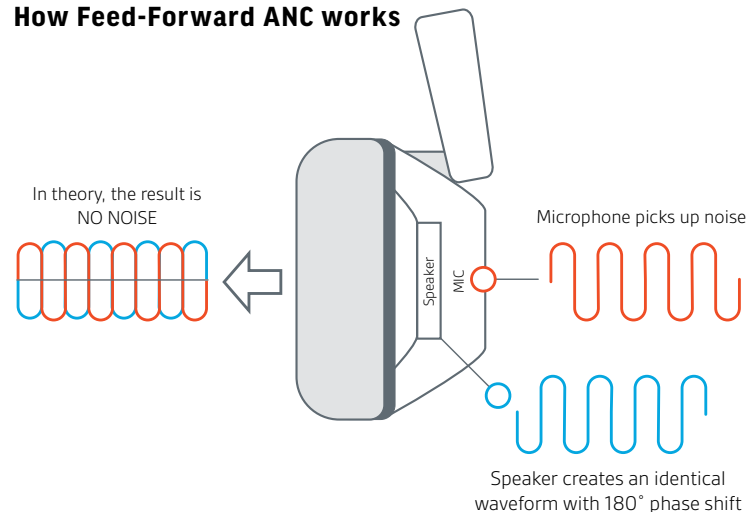
There are three different types of ANC available.

### FEEDBACK ANC (FOUND IN BLACKWIRE 7225, VOYAGER FOCUS UC, AND VOYAGER 8200 UC)

With feedback ANC microphones are placed inside the ear cup and monitor what the user hears.

- Monitors the sound the user hears and therefore can adapt and change to any variations in this sound
- A mispositioned headset will change the sound the user hears—feedback ANC will adapt for this
- Cannot deal with higher frequencies (above 800 Hz)

### How Feed-Forward ANC works



### FEED-FORWARD ANC

Feed-forward ANC is rarely used as the ANC microphones are placed outside the ear cup and monitor the background noise making is sensitive to wind noise etc.

- Works with higher frequency noise (1-2 kHz)
- Does not compensate for differences in wearing position, which may allow additional noise to leak into the ear
- Sidetone (during calls its your own voice you hear in the headset when you speak) comfort is poor

### HYBRID ANC (FOUND IN BLACKWIRE 8225)

ANC microphones are placed both inside and outside the ear cup (requires 2x more microphones) and monitors both what the user hears and the background noise.

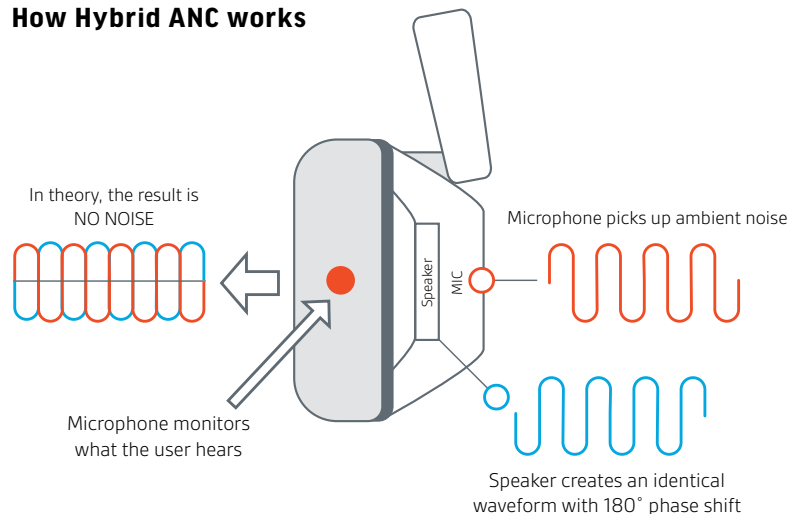
- Best of both worlds—feedback and feed-forward ANC
- Supports wider range of frequencies
- Sidetone is more natural and comfortable

With the Blackwire 8225, Poly has taken the performance of the regular feedback ANC technology to the next level with Hybrid ANC optimized for the distracting open office. It's not just the background noises that are different in the office compared to an airplane, but it's also how it's being used, most notably for calls.

There's an art to developing a good ANC headset that does not impact the audio when being used on calls, as well as not causing fatigue for the user. Poly uses its 50-year knowledge to optimize the ANC performance of all its ANC headsets, so they sound natural and cause less fatigue when used on long conference calls. For those users working in the most distracting of open office environments the benefits offered by the Blackwire 8225 with its Hybrid ANC technology provides the best experience to ensure they stay focused and productive.

The Blackwire 8225 includes a switch that allows ANC to be set to either Off, Mid, or High, allowing the user to select the best option for their surroundings, current task (e.g., on a call or listening to music), and desired audio comfort level.

### How Hybrid ANC works



To learn more visit [poly.com](https://poly.com).