



BIAMP PARLÉ BEAMTRACKING MICROPHONE

INVENT

a market-leading product to introduce an industry-first technology

DESIGN

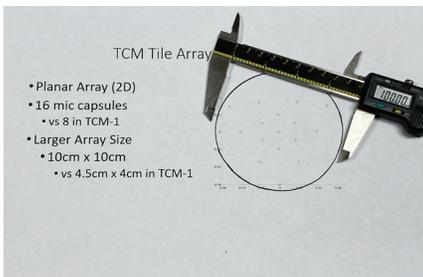
the freedom for users to be heard from anywhere in a conference room

MAKE

a cultural shift within the client's organization

The R&D team at Biamp had developed a new technology for a tabletop conference room microphone. Using four concentrated beam mics positioned in 90° “zones” and a processing algorithm that minimized signal loss, the device created a full 360° range that could capture a speaker’s voice as they moved anywhere in a room.

+ The challenge was to package Biamp’s ESP technology in a form that would beat the competition on size, sophistication, and ease of use. We knew the spec would sell the technology to those who cared. But the form factor had to tell a story that the tech couldn’t.



The engineering group had a layout for the tech and were working on the DSP. Their prototype required a PCB with a minimum 140mm diameter. At the time, the leading product on the market had an overall diameter of just 120mm. The team made several mockups at various sizes, but none were small enough to convey that this was a simple, elegant solution with state-of-the-art tech.

Then one day, as we were tinkering with something else entirely, we caught a glimpse of an array on a presentation. We drew a circle around it, and it measured 90mm.

+ Assuming it was possible, then, to produce a PCB only 90mm in diameter, we showed a quick sketch to the Biamp’s CEO. He was sold. The engineering team’s response, however, was far less enthusiastic.

We backpedaled a bit, saying we needed to make it smaller than 140mm, with 90mm – 100mm being ideal. And then we went back to the CEO.

+ “We need to know you have our backs,” we explained, “because we’re about to piss off your team.” He responded, “I love it.”



From there, we brought together Biamp’s engineers and confronted the issue. “What are the tradeoffs required to get this product from 140mm diameter to 90mm,” we asked.

The team had never been asked that kind of question. In the past, Marketing would sell whatever Engineering said was feasible. Now, the word “No” wasn’t an option.

+ Now, we were shifting the focus—and the culture—toward the best solution. And now, the CEO could sell the product because he knew it would be the best one out there.

In our experience, it’s not the place of Engineering to say, “No.” Instead, it’s their role to advise on how long something will take and how much it will cost—so that the decision-makers can align the process and the output with the business objectives.

+ By asking “What are the tradeoffs,” or “What has to happen to get this done,” we challenged and empowered the Biamp team to do something they didn’t think they could do.



Even with an approved design, the Biamp team faced new challenges. The concept called for a 360° band of LED light around the perimeter of the case. Not only did we have to solve for light bleeding through the speaker grille, but we also had to think creatively about how to power 12 LEDs and evenly diffuse the light to create the desired effect of a continuous “glow”.

The solution actually involved using more LEDs at only 30% power—using a PWM to fool the eye and conserve even more energy. We weren’t the electrical engineers on the project, but we still had to think that way to get to the best possible result.

The ultimate test—and the ultimate opportunity—came when Biamp’s lead M.E. left the company. We proposed integrating our teams so we could address issues quickly and efficiently.

+ At one point late in the process, a 1mm difference emerged between the mockup and the prototype. When we presented the prototype to the CEO, he caught it.



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It was an excellent checks-and-balances system that gave us the freedom to pursue the idea—and made us accountable for getting it right.

+ That’s where design leadership lives. In lock step with the product owner. At the top and the base of the pyramid. And because we shared a vision of what the product needed to be, we helped a \$200 million company compete and win against the world’s biggest players.

Design Leadership IDM
Industrial Design IDM + Fahrenheit
Engineering IDM + Biamp
Manufacturing Biamp + IDM