

## START ME UP



# KEF Muo Wireless Desktop Loudspeaker System

Honey, I Shrank the Speaker

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**D**emand for personal, wireless, and on-the-go audio has never been higher—certainly among Gen Xers, Gen Yers, and Millennials—but audiophiles of any age, or anyone else who wants a portable or desktop system shouldn't have to settle for substandard sonics. Enter the KEF Muo, a wonderful little wireless loudspeaker that delivers the sonic goods well beyond expectations, especially given its petite dimensions. Intended for those who want quality listening on the go, it's a tiny two-way that pumps out big, full, and expansive sound with respectable resolution—and even reproduces some sense of soundstaging on many recordings.

Achieving both great sound *and* portability is a tall order. Even in this crowded market segment, it's not easy to find that combination in a small, sleek, and smartly designed package. Producing big sound from a small speaker also presents big engineering challenges. Fortunately the UK-based loudspeaker manufacturer KEF has industrial designer Ross Lovegrove in its corner. Lovegrove, who designed the company's acclaimed Muon flagship floorstander, also conceived the Muo, which represents the opposite end of the speaker spectrum size-wise and price-wise. Yet the two have plenty in common: Many of the Muon's key design elements have been reproduced in the Muo, though obviously on a smaller scale. The Muo's smooth, modern exterior

is made from the Muon's same acoustically inert, solid, brushed aluminum that minimizes resonances (though with the Muo you can feel some slight vibration in the lower octaves). The Muo has a substantial weight and feel; at just shy of two pounds, it's heavier than it looks. (A pair could almost double as hand weights for arm curls.) It's available in six striking matte color options: Light Silver, Neptune Blue, Sunset Orange, Storm Grey, Horizon Gold, and a limited-edition Brilliant Rose. The form factor is vaguely cylindrical, only with three sides and gently curved edges. A pair of soft, rubberized stoppers on the bottom prevents rolling when the speaker is in its horizontal position. It can also be positioned vertically on its side/end and, when paired with a second Muo, played in two-channel stereo mode. When both speakers are positioned horizontally they're said to be in "party mode." More on this flexible usage later.

Yes, the tiny two-way Muo is elegant looking, cute even, but don't let its stylishness belie some serious proprietary technologies inside that have been "trickled down" from the Muon. (If you shine a light and look through the grille holes on the front panel you can actually see the drivers.) Let's start with the unique Uni-Q "point-source" driver array, a miniaturized version of the Muon's. There are two identical 50mm/2-inch full-range Uni-Q drivers, each with a decoupled central dome tweeter and midrange, in addition to one auxiliary long-throw radiator in between for better bass extension. When two drivers are placed closely together in a small enclosure, stereo imaging becomes difficult to extend beyond a limited sweet spot close to and directly in front of the speaker. High-frequency interference can distort and color the sound outside this area. In the Muo, only one Uni-Q driver handles the full frequency range, while the other driver plays only low and midrange frequencies. This configuration enables a "gentle" crossover for wider overlap and better sonic dispersion. Indeed, the Muo not only sounds like a larger speaker than it is, but its sound can fill a small-to-midsized room quite capably. In addition, either one (or a pair) is handy for desktop use, offers portability for travel, and paired most easily with my iPhone. (On practical note, I'd suggest that a slipcover case might be a worthy addition for a future model to help protect against marks and small surface scratches on the aluminum.) You can stream via Bluetooth 4.0 aptX from your computer or mobile device, or listen via an auxiliary input (DAC, NAS, etc.); plus there's a micro-USB input, which can be used for charging and firmware updates.

The Muo comes with a mini-USB (3.5) cable and a selection of international plug-in chargers (which vary by region) for its

Li-ion battery; KEF has also just introduced an optional pocket-sized portable charger (\$50) shaped like a mini Muo (which can also be used to juice up your smartphone or other devices)—not that you constantly have to worry about that: A full charge lasts for up to 10–12 hours of listening time, depending on playback SPLs. Also included is a small quick-start guide booklet (available as a PDF download on KEF's website as well) with mostly

## SPECS & PRICING

**Drivers:** 2 x 2" tweeter/midbass, 1 x bass radiator

**Inputs:** Bluetooth 4.0 aptX codec, 3.5mm aux

**Dimensions:** 8.3" x 3.1" x 2.3"

**Weight:** 1.8 lbs.

**Price:** \$350 each

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pictorial-based explanations and less text. Better still, there's a free KEF Muo app for both Android and iPhone (available via the Google Play Store and the Apple App Store). It contains clearer wireless setup instructions than the quick-start guide and offers handy access to your phone's iTunes library.

## Setup and Synchronization

Basic setup when paired with my iPhone 6 was quite user-friendly, but connecting with my Mac computers proved more challenging (as I'll describe shortly). You can pair the Muos in their vertical position for stereo use, or place them horizontally for "party mode" listening (that is, two speakers each playing in mono for increased volume potential); an internal DSP sensor automatically shifts the output based on the speaker's orientation. The smart little Muo even remembers up to seven devices and can prioritize pairings based on their initial chronological order.

The Muo has four buttons on one end: the main power and multi-function button (round one in the center), a smaller round one for synchronizing one speaker with another (via Bluetooth) for stereo mode, and a button each for volume up and down. Various chime tones indicate power on and off, as well as Bluetooth connection, disconnection, and synchronization.

To connect one speaker to your iPhone, turn the speaker on by pressing the center button for about three seconds, make sure your Bluetooth is on (under Settings native app), then select "KEF MUO" from "My Devices." You're all set. Connecting a pair of Muos in stereo mode (vertical position) requires another couple of button-presses (plus a little patience). First connect one—and *only* one—Muo to your phone via Bluetooth, then turn on the second Muo. On the first speaker, press and hold down both the main button and the smaller round one at the same time for two or three seconds. Repeat this on the second speaker (right channel). Sit tight while the Muos synchronize—about ten to thirty seconds or so, depending on the strength of the Bluetooth connection. You're ready for two-channel playback. You can also shift the speakers into horizontal position while they're playing, and they automatically reset from stereo to dual-mono or "party mode." Various combinations of two or three tones and a small ring of LED light (that switches colors) around the main button indicate changes in connection, disconnection, and power.

I experimented some with placement for stereo playback, varying distances between the speakers. Distances of up to 6 or 8 feet between the Muos with just a little toe-in seemed to work well for stereo, but I found I did as much nearfield listening at just a few feet. Though I listened less in dual-mono or party mode, up to 10 feet apart seemed do-able there.

Setup is quite similar with computer sources. As I'm a Mac gal, I used both a MacBook Pro (mid-2012) running OS X 10.9.5 and a MacBook Air (2015) running OS X 10.10.5. (The folks at KEF informed me that the connection process is quite similar for PCs—as expected.) In contrast with my iPhone source, I encountered a couple of minor glitches along the way—hardware-related as it turns out. I found I needed to reboot the laptops once or twice for the Bluetooth to "find" the Muo. In stereo mode, the Bluetooth connection was dropped in the right channel a couple of times but only very briefly. My MacBook Pro was running an older OS that didn't support Bluetooth aptX,

but I was able to find a workaround. If possible, I'd recommended updating to El Capitan or Yosemite, which both seemed to work fine.

## Sonically Speaking

How does the Muo sound? What struck me most was how engaging the presentation was; I didn't expect the degree of detail, coherence, and immediacy. How they packed this remarkably clean- and clear-sounding configuration into this sleek, petite form is a wonder—and a testament to the Muo's clever design.

I mostly listened to Tidal streaming (hi-res version in Chrome) and tracks from my library ranging from lousy mp3s and Red Book CD rips, to high-resolution tracks. The Muo certainly made the most of the lossy/low-res files, presenting them with better sound than they had any right to have. Cuts from Tori Amos' *Under the Pink* (2015 remastered version) streamed via Tidal (in its hi-res version) revealed excellent midrange prowess and presence. The Muos were able to convey the emotion behind her plaintive, pleading vocals. Sibilants seemed spot-on. Tori sounded like Tori, and her Bösendorfer piano also sounded quite true-to-life (though miniaturized). A listen to Miles Davis' "So What" and other cuts from *Kind of Blue* via Tidal delivered pretty quick transient attacks and delicate decays, particularly on Paul Chambers' double bass, and pacy energy throughout. Cymbal taps were quite clean and nuanced, with effortless loud-to-soft dynamics across all percussion. As one would expect of such small speakers, soundstaging in stereo mode wasn't huge; nevertheless, some sense of the musicians' distances from each other was maintained.

The Muo is light and quick in balance, which lends it a pleasing sense of effortlessness—an advantage of certain smaller speakers. But the Muos can also rock out, as I discovered on the White Stripes' heavy-duty, brash and bluesy "Ball and Biscuit," where the speakers flexed their muscles to reproduce Jack White's growling guitar licks admirably. I was told the Muo goal was to maintain cleaner sound over louder sound, even if that means sacrificing a little dynamic headroom or bottom-end. Obviously the Muos don't sound like floorstanders, but they sound larger than they are, and their ability to image in stereo is more than respectable, albeit miniaturized. Careful placement also helps.

Priced at \$350 each, the Muo might not be the cheapest in its category, but its sound and robust build-quality would give a good many compact, portable, and wireless speakers a run for their money.

## Conclusion

In the areas the Muo is designed to play in, it plays very nicely indeed. As I've described, it's a scaled-down "mini-me" version of the Muon. Though it contains many of that flagship model's materials and technologies, the little Muo could hardly be expected to deliver comparable sound. But the point here is about leveraging what *can* be reapplied—such as the design of the driver array—to elevate the portable and wireless speaker experience. As such, it's an overachiever in many aspects. It's no small feat to make a speaker of this size sound as big, expansive, and remarkably detailed as it does. I'd enthusiastically recommend the Muo (probably a pair) to non-audiophile friends who are music lovers. I'd even give it a thumbs-up for certain audiophile friends (those who listen to digital, that is). Further proof that great things can, and do, come in small packages. **tas**