

# Computer Audio Design USB Filter

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Scott Berry's first product beyond the boxes (DACs and CD transport/servers) was a USB cable. The original Computer Audio Design USB I was highly praised in its day, but that day was a dozen years ago. The latest version, the USB II-R, has received universal praise (it was tested in issue 217 and won USB Cable of the Year in our 2023 Awards). In the past, CAD offered two grades of cable, but with the launch of USB II-R it made a single USB offering, and launched the USB Filter as an upgrade for users of other brands of USB cables.

With all the excitement over the other grounding boxes from CAD this small in-line USB filter flies a little under the radar. In fact, those who try it think it's the gateway into Computer Audio Design's ethos. Users of premium USB cables from other brands can connect the USB Filter between the cable's USB B plug and the audio system's USB Type B receiver socket and experience such an enhancement that they become believers. The CAD USB Filter does not undermine the value of a high-performance USB cable; it complements it.

## Secrets

The exact nature of the filtration remains a secret, but the CAD USB Filter is designed to reduce high-frequency noise on the four conductors within any USB cable: the signal, ground, and power rail. The latter is particularly problematic; USB sends 5V to power (or charge) connected devices. This method is inherently noisy, and – being

sensitive audio enthusiasts – cable manufacturers have endeavoured to eliminate this intrinsic noise-producing characteristic. In CAD's own cable, the +5V conductor operates independently from the other three conductors, yet even this did not suffice. The USB Filter introduces an additional buffer between that noise source and your USB receiver.

This should make it an essential device. It even functions with audio-specific cables that lack a power conductor! Once again, regardless of the amount of shielding employed, there is still some leakage between conductors and between the cable and the external environment. The USB Filter mitigates a considerable amount of that interference.

I admit to some preconceptions here. Most high-performance USB cables make similar claims to reducing noise between conductors and the outside world. Would the CAD USB Filter have a performance ceiling? Put simply, no! You can use it with anything from a giveaway USB cable to the most exotic cables you can think of and it will help. Often help in major ways. And, while the chances of someone using a £750 filter on the end of a £5 USB cable is at best 'unlikely', it does make a great proof of concept.

There's a precision to the sound of that giveaway cable with the USB filter that challenges more expensive cable set-ups; whether that's the attack of a percussive beat or the delicate fade of a reverb tail, the music is given a sharper focus, and you have closer contact with the sound. Those who stick to the 'bits is bits' argument and dismiss

aftermarket USB cables as window dressing might change their minds after hearing the addition of the filter. If they are as open-minded as they claim.

However, as one ascends the ladder of cable quality, more sonic gems become apparent. I tested it on every USB cable I could find, and it functioned effectively on all of them! Already quick-sounding USB cables acquire a slightly 'crisper' and 'livelier' quality, expansive cables gain additional dynamic range and scale, and those cables that excel in enhancing a soundstage suddenly uncover even more potential.

If there is a focus to the USB Filter's sound, it lies in leading-edge extraction, enhancing rhythmic drive and dynamic range. Aspects of performance such as soundstage scale and air are not overlooked, but the more you listen, the more your foot begins to tap.

Many have already selected their 'forever cable' in USB; not all will have chosen CAD's design. However, regardless of the brand, the CAD USB Filter will bring out the best in that cable. +

## Price and contact details

Price: £750, \$750

Manufacturer Computer Audio Design

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