

Robbie Robertson & Bob Clearmountain on the 50th Anniversary Remix of *The Band*

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Warm Audio TB12 Black Tone Shaping Mic Pre

The “Tone Beast” is back in black!



REVIEW BY ALEX HAWLEY

Founded in 2011, Warm Audio aims to deliver professional gear at affordable prices for everyday musicians and engineers. It offers a range of microphones, preamps, compressors, and EQs, all of which are inspired by classic studio gear. Here we'll be looking at the TB12 “Tone Beast” Black, a single channel mic preamp modeled after the API 312. The original 312 was used in API consoles from the 1970s and is often found today in the form of a four-channel rack unit, the API 3124, famous for its punchy sound and detailed midrange. It's one of my personal favorites for capturing powerful guitar tones and rock drums.

The API 312 is a simple, straightforward design armed with a single Class A op-amp and a pair of input and output transformers. The first Warm Audio preamp design, the WA12, approximates the 312 architecture. In turn, the new Warm Audio TB12 is essentially a WA12 on steroids—made with the same high quality components and taken to the next level by adding multiple discrete signal paths for more tone shaping capabilities.

Black is the new orange

The Warm Audio TB12 originally came in orange; now it's black and features an internal power supply instead of the external wall wart found on the orange model. The standard IEC power connection is a convenient addition and represents the only real change from the orange to black releases.

Tone shaping

The TB12 front panel is loaded with tone shaping options. The first choice is between two different discrete analog op-amps, labeled Vintage and Clean. While the label for these settings has been simplified for the black model, the components themselves remain the same.

The Vintage setting engages an x731 op-amp built from the same schematic as the classic Melcor 1731 (predecessor of the famous API 2520 op-amp). The x731 is rich with harmonic character and adds a warm and thick coloration to the signal; the effect becomes especially apparent when overdriven. It adds weight and punch to the signal, most noticeable in the lower midrange. The Clean setting enables the Warm Audio x18 op-amp, which is a reproduction of the Jensen 918. It sounds clean and modern and reproduces the signal with more transparency in comparison to the x731. I appreciate the updated labeling and being able to choose Warm or Clean at a glance.

It's worth noting that Warm Audio makes it easy to modify the op-amps in the TB12; as long as they conform to the standard 2520 pinout configuration, you can swap op-amps without any soldering. In my experience with the TB12, the stock op-amps sound fine and provide a flexible sonic range. You wouldn't need to swap either of them out unless it's for the sake of experimentation or personal preference.

Next to the op-amp selector are three push-button switches. The first one, Tone, is paired with a red LED indicator. The tone button adjusts the configuration of the input transformer from a 1:4 turns ratio (switch out) to a 1:8 turns ratio (switch in), which results in the impedance jumping from 600 ohms to 150 ohms when engaged. This boosts the signal by +6dB, which in turn drives the op-amp and output transformer harder. Engaging this button brings out more character and coloration in the sound. If you're going after a colored and gritty tone, it sounds cool to engage the tone button, drive your signal into the vintage-style x731 op-amp, and hear the signal get drenched with harmonic character and analog warmth. This setting also pushes nicely into saturation and overdrive if that's what you're after. I enjoyed using this setting with a ribbon mic on a guitar amp—the sound has a lot of weight to it, and it's punchy. It also adds a lot of character when going DI with the Hi-Z input. When this setting is engaged, the maximum gain jumps from +65dB to +71dB.

The next tone shaping setting is the capacitor switch. The Vintage setting engages a tantalum capacitor, while the Clean setting uses an electrolytic capacitor. The tonal differences to my ears are subtle, but undoubtedly contribute to the shape of the final tone.

The TB12 has two different output transformers to choose from, both made by CineMag, as well as the option to remove them from the circuit altogether with a bypass switch. The Steel setting is a bit warmer with a more pronounced midrange. I like it for electric guitar, drums, and male vocals. The Nickel setting is a 50% nickel core transformer that sounds more transparent and was designed by CineMag specifically for the TB12. I love using the nickel setting for signals that need a slightly smoother and more balanced response. I've used it for acoustic guitar and female vocals, but it sounds great on anything that needs a cleaner sound.

Output gain staging

The output gain staging on the TB12 is very clever and makes it possible to get

the most out of the different components. It features independent gain and output level knobs for complete control over the output signal being sent to the interface, converter, or whatever comes next in your chain. This allows the flexibility to dial in how hard the components are being driven (or overdriven) without clipping the next item in the signal path. I love taking advantage of these controls to add some saturation to the signal when it's called for—it brings out all the different tonal characters on tap.

Connections

The TB12 has a variety of connections. There are parallel XLR inputs (one on the front panel for easy access, and one on the back). There's a 1/4" line level input, a Hi-Z instrument input, XLR or TRS balanced output, and an insertion point wired between the input transformer/op-amp and the output transformer. 80Hz highpass filter, polarity, -20dB pad, phantom power, and line-level/Hi-Z selector switches are conveniently grouped on the front panel.

Conclusion

You'd be hard pressed to find a more feature packed mic preamp, especially at this price point. The components are high quality, and the ability to shape the character of the input opens up both practical and creative possibilities. It's an excellent value for the money. If you're looking for a colored tone with a thick and punchy low-midrange, this preamp will get you there. It won't be the right choice if you're seeking clean, accurate, or transparent. The only thing I wish it came with is more channels. It would be challenging to fit this many components and features into a multi-channel rack unit without it growing in size, but my main issue with the TB12 is that one channel isn't enough—I suppose it's time to make room in the rack to fit a few more! ➤

Price: \$599

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