

# API

## THE BOX 2 console

With the shift to digital recording and razor-thin budgets in recent decades, recording consoles have disappeared from many modern recording studios. In place of a 96-channel behemoth, a new studio may have a simple desk topped with a sleek DAW controller, or even just a mouse and keyboard. While this evolution may make sense financially, what are we missing in our *Brave New World*? Is it possible to be streamlined and fiscally responsible without giving up the sounds and techniques made possible by a traditional console? Only a handful of legacy console manufacturers have attempted to answer that question, and API is one of them. In 2013, they unveiled the original BOX [Tape Op #101], which was a compact console squarely aimed at the modern studio. Covering all the basics and then some, the first BOX could be the centerpiece of many compact musical spaces, and over the last two years it's proven to be just that in my project studio. With the BOX 2, API has expanded on the original concept of creating a big console sound in a small format by adding four additional input channels along with a few other welcome additions and improvements. With eight mic inputs including 500 Series slots, a 16-channel summing section, three Aux Sends, a monitoring system, and two built-in API 527 compressors, the new BOX 2 is a console that's much greater than the sum of its parts. I had the chance to try out the new version of this console in my studio for several weeks and thoroughly enjoyed it (despite my original BOX giving the new one the side-eye).

You can tell a lot about the BOX 2 just by looking at it, largely because the control section is nicely elevated, making everything easy to access. This is a clever ergonomic design decision, as it allows you to stay planted in the mixing sweet spot while making adjustments. The layout of the board is split with eight input channels on the left, a Master Section in the middle (the original center section lived slightly to the left, between the Inputs and Summing Inputs), and 16 summing inputs on the right. At the bottom of all 24 channels, you'll find identical controls anchored by 100 mm channel faders, Mute and Solo buttons, plus a pan knob. I certainly haven't tried every console out there, but in my experience if the faders don't feel good it's a big turn off. The BOX 2's faders glide smoothly, allowing for precise level changes. This is a noticeable improvement over the original BOX in my opinion, and to that end, API claims to have worked directly with the manufacturer regarding component quality. The console's mute and solo buttons are also bigger and more responsive than those on the classic BOX. I found them much easier to use for live and dub style mixing, and they're brightly backlit so you can quickly read the state of the mix at a glance.

Each of the eight input channels is based on API's renowned 2520 op-amp, providing balanced mic and line inputs. The mic signal path includes an input transformer and +65 dB of gain, whereas the line inputs are fixed at unity gain. I found the fader's +12 dB of gain sometimes isn't enough for many synths and drum machines, and I had to run them through DIs before heading into the console. Speaking of DIs, the jacks on the original BOX used to be located on the back of the console, alongside the other I/O, which made them difficult to access. When an instrument cable was inserted, the mic input is defeated, which meant you had to reach around back and unplug a cable when changing sources. With the BOX 2, API has addressed this awkward

situation by placing the DI jacks on the front, right under the armrest. This makes it super easy to quickly plug in a bass guitar or synth to record (the last four inputs can have theirs wired up at the factory for a fee). Another feature unique to the first four inputs is their ability to easily access the onboard pair of 527 compressors. These VCA compressors provide both feed-back and feed-forward compression types, high-passing of the sidechain using API's THRUST circuit, and stereo linking. Missing from the original 527 is the output gain control, which can make level-matched comparisons tricky. By default, the compressors are assigned to the mix bus, but a pair of buttons allows you to individually assign them to the first four inputs. Having the 527s a button press away makes it easy to tame inputs during tracking, but I also find myself running recorded tracks into the line inputs so I can use the compressors during mixing. A related feature I use all the time is the Comp Post button, which moves the compressor from before the 500 Series slot to after. Being able to make all these changes right on the console, without having to move your head out of the sweet spot, is awesome!

Did someone say "500 Series?" Where the original BOX came with two immovable API 550A EQs and two empty slots, the new BOX allows more freedom by shipping with eight empty 500 slots. The lack of modules also keeps the initial purchase price down, although you'll no doubt want to fill these slots sooner than later! The 500 Series integration is well-appointed, with extensive I/O around back, allowing not only direct patching out of the mic pre (before the 500 Series module) but also in and out of the 500 Series module itself. Paired with a patchbay, this becomes a powerful way for a single channel to use multiple 500 Series modules. While there is no button to disable the 500 Series slot, I never found that to be a problem, since many modules include ON/OFF switches. Each channel has a direct output fed by the fader signal with all its 500 Series and insert processing. Engaging the "Dir Pre" button moves the output to earlier in the signal path, directly after the preamp. While there's definitely an allure to capturing the complete sound during tracking, the ability to record the dry output showed its merit during the COVID-19 lockdown. Since it was essentially illegal to have anyone over to record, I found myself playing and recording drum tracks myself. I'd engage Dir Pre to bypass the 500 Series module and get a solid level to the DAW from the direct out. Each of the drum tracks in the DAW had inserts, which were patched directly into their originating channel's 500 Series module. On playback, I could dial in the right EQ setting, and eventually disable Dir Pre so it was applied to the mic signal on future takes. If that's all a little confusing, just know that this little BOX packs a lot of versatility.

On the other side of the console, the summing channel strips present a simpler affair. They're laid out in pairs with the clear intention of being fed by stereo stems during mixdown. New in this version of the BOX is the addition of a small four-segment LED meter. You're not going to make any precise decisions with it, but it's handy for quick visual confirmation. Plus, who can't appreciate more blinking lights? The limited controls and lack of preamps may have you thinking that these summing channels are a one-trick pony, but think again! Each channel has a balanced insert that can be used for your typical hardware processing during summing. The interesting bit here is that the Insert Send is constantly active, regardless of whether the Insert Return button is engaged. This means you can use the send as a direct output, just like on the input channels! For example, I have the summing channel's Insert Sends normalled to DAW inputs on

my patchbay. Feeding these summing inputs is a set of external mic pres that have a variety of gear hanging off them: Synths, drum machines, more mics, etc. When I want to sum a mix, I just patch in the DAW outputs to the summing channel inputs. This setup transforms what initially appears like an 8-channel mixer into a 26-channel mixer (32-channels if you steal the Monitor Sends) with an optional summing section. If it's not obvious by now, the new BOX, like most consoles, is far more flexible with a patchbay. While the cabling and patchbays are no small investment, it's well worth it if you want to take advantage of every inch of the mixer.

A feature I find incredibly useful on the summing channels is the 0 dB unity gain button. When engaged, it takes the fader out of the signal path, allowing for quick and precise recalls. I was disappointed that API didn't add this button to the mic input channels in the new version. It would make using those inputs during mixdown as easy as the summing channels. That's a small complaint, however, and can probably be filed under "can't have it all."

The final feature of the summing channels is shared with the input channels: The Aux Sends. The BOX has two mono and a single stereo send – each with a pre fader option. The Stereo Send can be toggled to feed the dedicated Cue Bus on a per-channel basis, which makes it easy to create an artist headphone mix. In the Master Section (more on that later), each send has a Master Level knob and Solo button. There are no dedicated Aux Returns on the BOX, which I find only occasionally unfortunate. Most of the time, I just return on unused summing channels, which opens the door for experimenting with controlled feedback by using the channel Aux Send. Another option is to use the Program Sum input as an FX return. This stereo input only has an On/Off switch, which makes it less useful at pleasing my inner King Tubby.

Tying everything together is the Master Section that sports the same summing specs as its bigger brothers, the 1608 [#81], and 2448 [#130] consoles. The Solo Section ticks most of the boxes with SIP, AFL, and PFL options, plus the all-important Solo Clear button! The Control Room section supports two sets of monitors with the requisite Mute and Dim functionality. If it's important to you, you'll need to bring an external solution for controlling your subwoofer since the BOX has no affordances for that. The Control Room Mix can be fed by the Program Mix or any of the four stereo 2-track Inputs. All of these sources can't be monitored simultaneously because API expects the stereo 2-track Inputs will be used as DAW returns and therefore should be exclusive to prevent any feedback. While this is a fair assumption, I personally don't use the inputs like that and would get more use from them if they were all available at once.

The Cue System is comprehensive enough to support a few setups. In mixing, you could use the Stereo Cue Output like another Aux Send, and then in tracking use it to feed an artist mix. For simpler headphone mixes, the BOX provides the same routing buttons as the Control Room section, allowing you to fold in the Program Mix, plus any of the 2-track Inputs (additively, this time). When tracking vocalists, I'll often return a reverb to a 2-track Input, then route that only to the artist's cue mix. There are plenty more 2-track Inputs to use here for things like metronomes and guide tracks.

Separate from the Cue Mix, there is a dedicated headphone mix that can be fed by either the Stereo Cue or the Program Mix. In practice, this means you can route the Program to your headphones for monitoring (with a jack on the front of the console), and then create a customized artist mix using the Cue Send on each channel. Along with the built-in talkback mic's ability to be routed to several locations, I've rarely wanted for anything else from a Master Section.



If you're considering making a sizable hardware studio investment, reliability and customer support are clearly factors to consider. API was super responsive the one time I needed to contact their tech support due to an issue and didn't even shame me when, after a week of diagnosing, they discovered the issue was just some bad cabling on my end. On the reliability front, op-amps are a component known to go out on consoles, and APIs are not immune. New to this version of the *BOX* are socketed 2520 op-amps, making replacement quite literally a snap. The channel electronics are arranged into individual assemblies, which means if there's a problem with one it can easily be removed, then shipped back to API without getting out the soldering iron. All of this, plus the other improvements mentioned in this review, proves that API listens to their customers and knows how to support them.

Two years ago, the *BOX* changed my focus in the studio from the computer to the console. Having a console makes things more immediate, spontaneous, and frankly more fun than always mousing around. If you're looking to upgrade your workflow, give your productions some more punch and depth, and generally get more hands-on with your music, the updated *BOX* should be at the top of your research list. (*\$16,795 MSRP; [apiaudio.com](http://apiaudio.com)*)

*-Ed Hickey <[edhickey.com](http://edhickey.com)>*