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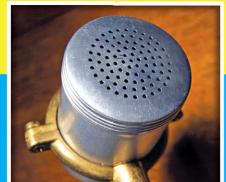
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REVIEW

QSC

TouchMix-30 Pro Digital Mixer

From live venue to studio—with one little cable



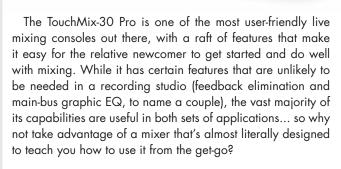
hile most recording musicians think of QSC as a maker of (really good) PA speaker systems, the company has been garnering an ever-growing fan base for its TouchMix series of portable digital mixing consoles. These compact and affordable digital mixers take their name from the large color multitouch display that provides the user with nearly all of the mixer's control functions and visual feedback. The original TouchMix-8 and TouchMix-16 have now been joined by the TouchMix-30 Pro, which is just as much at home in the studio as in live applications.

I had a chance to work with the TouchMix-30 Pro for a while, wiring it into my home studio in place of my usual mixer, and found that there is a lot to like in this powerful digital mixing and recording solution.

Why use a live mixer in the studio?

Many engineers double up on studio and live work, and if you don't mind doing a bit of patching and unpatching (you were careful to label all of your cables before you unplugged them, right?), a digital mixer that you've learned to use effectively in the studio can be quickly taken out in the field. Learning just one mixer's workflow gives you a firm grasp on everything you'll need to know when recording a band, be it in your tracking room or on stage.

Besides, in recent years, live sound has been where a lot of the coolest new trends in mixer design have been making an appearance, and many musicians are discovering that what streamlines and simplifies setup and operation in the heat of a live performance can be equally welcome in the studio. Just as one example: wireless remote control of mixer functions over Wi-Fi, whether for the engineer or the talent, started out as a timesaver in live setups, but is quite useful in the studio as well.



The basics

For an engineer that expects a lot of faders and knobs and switches on a mixer, the TouchMix-30 Pro presents a stark, simple interface. A fairly portable box at roughly 17" square in footprint and about 7.5" tall at the back, the only analog controls on the mixer are the gain pots for the first 24 input channels. The rest of the interface is taken up with the 10" color capacitive multitouch display, 23 backlit buttons, and a push-turn encoder surrounded by a bright blue LED ring for easy visibility in a darkened club. The encoder controls whatever function is highlighted at the moment; pushing in and turning gives finer control of the same parameter (e.g. 01. dB level increments vs. 1.0 dB).

Many of the buttons select commonly-used pages on the display: a Home button with a graphic of several faders gets you back to the overview of the mixer, and there are buttons for USB Record/Playback, FX Mute, Talkback, Phones and Monitor level, and so forth. The rest select display pages that allow quick access to a particular parameter for all channels at once, such as 48V phantom power or the built-in Real Time Analyzer. Eight User buttons are reassignable if desired, but come preset with useful functions like moving left and right

in groups of faders, clearing the Cue mix selections, or copying and pasting channel settings.

The rear panel offers 24 XLR channel inputs (four of them being XLR/TRS combination jacks), 6 balanced 1/4" TRS inputs for three stereo sources, 30 channels in all. (Channels 29/30 can also be fed by a smartphone, thanks to a stereo minijack under the front-panel $^{1}/_{4}$ " headphone jack.) While some engineers will miss digital connections like S/PDIF or ADAT Optical or AES/ EBU, I feel that there's a definite place for a mixer that focuses completely on analog inputs; it's what most live situations and entry-level studios demand. Many high-channel-count mixers and interfaces may only have a few actual analog preamps, relying on optical digital connections to external preamp racks for the rest. This represents extra expense and cabling that the TouchMix-30 Pro neatly avoids. It says you can plug in 30 channels, and yep, you can!

There are 14 XLR Aux outputs, stereo XLR pairs for Main Mix and Monitor outs, and three 1/4" headphone jacks for the Cue mix, Aux 11/12, and Aux 13/14. There's an XLR Talkback mic input, too. Digital connections include two USB-A connectors for storage media, an Ethernet jack for connection to a computer network or wireless router, and an all-important USB-B connector that we'll get to in a moment. The mixer even comes with a locking IEC power cable to prevent accidental unplugging.

Operation

With 30 physical inputs, 24 mic channels, and a whopping 14 Aux channels, the TouchMix-30 Pro is well suited to live situations with multiple monitor mixes to feed. In the studio, some of the Auxes can be used to feed headphone amplifiers while the others can be pressed into service feeding signals to outboard signal processors.

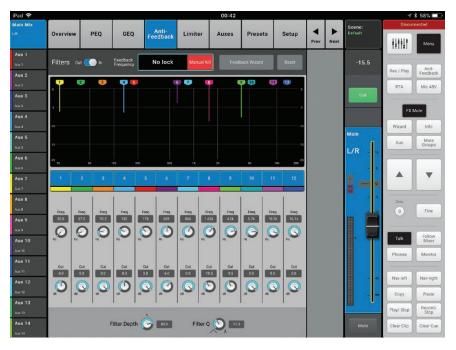
Speaking of signal processing, the TouchMix-30 Pro has a fair bit of effects horsepower under the hood. Each input channel has its own EQ (four semi-parametric bands plus lowcut and high-cut filters), compressor, and gate. There are also six FX processors shared by the mixer; each channel has its own sends and returns, and FX can be routed to the Auxes for monitoring purposes as well

as to the Mains. The Mains themselves have a 6-band fully parametric EQ, 31-band graphic EQ, Anti-Feedback (a network of 12 notch filters with global Q and up to 16 dB of cut), and a Limiter. There's even a Pitch Correct effect that you can assign to one input of your choice—for that pitchy lead singer who makes you cringe.

The FX engines were a pleasant surprise, offering surprisingly good sound quality for monitor mixes or recording. While they won't replace a high-end hardware reverb or full-featured delay plug-in, they'll do the job nicely for basic reverb, delay, and chorus, with easily tweakable parameters and a large library of presets to choose from.

of input being processed (e.g. vocals, drums, or guitar). The Gain Wizard guides the user through setting trim levels for each channel, based on how often the mixer sees clipping while music's being played into it. The Tuning Wizard uses a measurement mic connected to the Talkback input to hear a test signal played back through the PA and suggest tweaks to the graphic EQ to even out room response. This latter feature is great for live shows, but I'd caution against using it as a cure-all for trying to "fix" a recording studio that hasn't been acoustically treated.

If that's not enough, there's a dedicated Info button that brings up a massive menu of topic-specific tutorials and sections



We're off to see the Wizards

It's a fact of life that live mixers are often handled by employees of venues who aren't professional engineers, whether you're talking about a small café, a corporate meeting room, or a house of worship. That makes simplicity and trainability vital for the best results, and QSC had this in mind when it added the Wizards to its mixer line.

A Wizard is essentially a one-screen interface that quickly and simply guides the user through a process that's common, vital, and easy to get wrong. The Touch-Mix-30 Pro includes three such processes, accessed from the Wizard button.

The FX Wizard assigns the internal FX engines where needed, and helps the user choose presets based on the type

of the User Manual, right on the screen. Even after decades of work in this industry, I still find myself wishing I had a manual for this or that product at a critical moment—problem solved!

This desire to make things easy is also seen in the massive library of channel presets and scenes that are recallable and storable throughout the mixer's architecture. QSC has put a lot of effort into providing practical, musical setups that will get you going quickly with only a little tweaking to zero in on the sounds you need, making the TouchMix-30 Pro even more beginner-friendly. Almost every tab of every type of channel can be quickly copied, pasted, and stored, so you can build up a library of best practices for your needs.

QSC TouchMix-30 Pro Digital Mixer

Going wireless and more

The TouchMix-30 Pro can be operated from a free app for iOS or Android. This can provide everything from a full representation of the main display to a simple "more me" Aux level control for a player. Wireless communication can be set up by attaching a Wi-Fi USB dongle to the mixer, hooking up a wireless router via Ethernet, or wiring the mixer into an existing LAN. Having this kind of external control can be very handy for tweaking monitor mixes, checking sound around the room, or even setting up the mixer in an out-of-the-way spot so it doesn't take up desk space near your DAW in a cramped control room.

I didn't get a chance to use every feature exhaustively on the TouchMix-30 Pro in my limited review period. Some of the other treats worth mentioning are user-assignable Sub Groups, Mute Groups, and DCA Groups (eight of each, for ganged control of user-selected channels); a user-assignable Patch Matrix for complex signal routing through the console; direct multitrack recording and playback from USB media; remote control from USB MIDI devices; safety lockouts to prevent unauthorized tweaking of various parameters (remember that "more me" guy?); and lots more.

That one little cable

Last but not least, we return to the rear panel and that USB-B connector, which is the key to really making the TouchMix-30 Pro shine in a studio environment. Previous models allowed for multitrack recording and playback to and from USB storage media. Tracks could be directly imported into a DAW, or the user could take advantage of the free QSC DAW Utility that streamlined the process (and allowed DAW tracks to be collected for USB export and playback on a TouchMix board). This was a relatively seamless process for capturing live shows with minimal fuss and editing them later, but it lacked the immediacy of recording audio and having it immediately available in a DAW.

That conundrum's now been solved with one little cable. The TouchMix-30 Pro can be plugged into any audio computer (macOS computers are already working seamlessly, with a Windows driver coming out of beta and into general release by the time you read this) and instantly recognized as a 32 x 32 audio interface, with 16-bit or 24-bit audio at 44.1 or 48 kHz on all channels. (Channels 31/32 are for DAW 2-track recording and playback, separate from the standard I/O arrangement; see the QSC website for a tutorial on how this works.) Setup on my studio DAW literally took 90 seconds, and worked flawlessly right out of the starting gate.

Thanks to the flexible routing choices in the mixer's architecture, the studio engineer can choose how much, if any, of the console's built-in DSP functions to make available to the DAW, whether printing tracks with effects or sweetening Aux buses. With comprehensive delay compensation, mixdown through external processors becomes straightforward and seamless. Essentially, the Touch-Mix-30 Pro becomes a DAW interface that can handle all the hardware in a small to medium-sized studio without the need for repatching or submixing, with extensive hardware routing and built-in effects when needed.

Final thoughts

In my review sessions, I never failed to be impressed by what the TouchMix-30 Pro could do. It's a deep and complex mixer, with a lot of the fear of learning mitigated by its many beginner-friendly shortcuts like the Channel Preset and Scene libraries, Wizards, and easy-to-access Info screens.

Audio quality was quite good. The preamps offer 60 dB of gain plus 15 dB of additional digital trim; they did well with low-output dynamic and ribbon mics, cleanly representing the sources rather than offering any "vintage flavor". As mentioned before, I liked the sound of the built-in effects, and I was pleased with what the TouchMix-30 Pro passed along to my DAW.

Is the TouchMix-30 Pro a complete solution for everyone? Probably not; some folks will demand more digital I/O, and others may insist on highresolution sampling rates. But for the studio with a drum kit, some guitars and amps, and a few vocalists to record all at once, it hits a really good sweet spot in terms of connectivity and features. Being able to pull it out and take it to a venue for live recording direct to a laptop DAW is a sweet bonus, with wireless remote control as the cherry on top... and at a surprisingly affordable price, too. If you haven't thought of QSC as a maker of studio gear before this, now's the time to start.

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