

**DESK JOB** > Half the fun of the MW12 is its full stand-alone mixing ability, including 3-band EQ per channel and dual aux send/returns on 1/4-inch connections.



**GROUP THERAPY** > A paired Group 1-2 bus sends selected channels to a separate stereo group output for creating submixes.

## YAMAHA MW12

### GO ONE AND DONE WITH COMBINATION MIXER AND USB INTERFACE

BY BEN MCFARLANE

> The possibility and growing practicality of fully mobile, laptop-based studios has changed the paradigm for music production at the same time that comprehensive multitrack and synth software packages, such as Apple GarageBand and several LE versions of professional DAWs, have become ubiquitous. This software is not only getting better, but it's also much easier to access legally in bundles with audio hardware. Just about every audio product with a USB or FireWire computer interface includes limited but still very capable music-recording software.

The hardware for recording and processing audio is now more common and affordable than ever, and the Yamaha MW12 is one among many small desktop mixers that double as a USB audio interface; it can go with you on the road to mix live into a laptop. The roaming computer-based sound studio is quickly becoming robust, flexible and more like a pro studio.

Upon first impression, the 12-input MW12 and its 10-input cousin, the MW10 (\$249), appear to be great deals and threats to the many small audio interfaces of the world. The Yamahas are small USB interfaces and mixers costing roughly the same price as some of the better USB interfaces. Since they support only 24-bit/48kHz recording, however, the Edirol UA-25 isn't in immediate jeopardy. Despite a few small demerits, the MW12 is still a fantastic and useful mixer/interface and fills the needs of anyone who's looking to record and produce a demo outside of their home or studio.

#### SOCKET TO 'EM

The MW12 is basically a Yamaha MG12 with a USB interface. It has the same chassis and layout. All the inputs and outputs are on the back panel. All six XLR connectors have Yamaha's "invisible" mic preamps with phantom power. Like most small mixers, the 12 in the title reveals the number of inputs on the board, including four stereo and four mono channel strips. Channels 1-4 have an insert I/O for routing the signal through an effects box.

The MW12 also has the standard peripheral inputs and outputs of most other Yamaha mixers. There are stereo group outputs in case you want to send audio to another mixer or monitoring device. An RCA stereo input (2TR IN) could, for example, accept audio from a turntable or CD player. There are also two auxiliary sends and returns, a

#### YAMAHA

##### MW12 > \$359

**Pros:** Combines a fully independent, 12-input mixer with a stereo USB audio interface. Nice software bundle. Smooth, bug-free operation. Low price.

**Cons:** Doesn't support audio up to 96 kHz.

**Contact:** [www.yamahasyth.com](http://www.yamahasyth.com)

#### SYSTEM REQUIREMENTS

**Mac:** G4/450 MHz; 256 MB RAM; 1 GB free hard-disk space; OS 10.2 or later

**PC:** Pentium or AMD/500 MHz; 256 MB RAM; 1 GB free hard-disk space; Windows 2000, XP Home or XP Professional

stereo monitor mix output (C-R OUT), a main mix output (ST OUT) in XLR and 1/4-inch formats and the USB connection. Incoming audio from the USB is mixed with the RCA 2TR IN.

The top panel controls mix and route all of the inputs, outputs, sends and returns. Also, the prefader listen switch allows easy, independent monitoring for each channel.

### THE SETUP

The MW12 comes with a full range of good software, including Steinberg Cubase LE (one advantage of Yamaha's recent purchase of Steinberg). It's also

bundled with IK Multimedia AmpliTube LE, T-Racks EQ, SampleTank 2 Free and Sonik Synth 2 Free. You should also check for the latest version of Yamaha's proprietary ASIO driver in the Downloads section at Yamahasynth.com.

I tested the MW12 with some low-cost industry standards, connecting a Shure Beta 87 mic to the channel 1 XLR input via an ART Tube MP project series preamp. I ran the mixer directly into my computer via USB. That tested how the MW12 sounded in the signal chain of a reasonably low-noise, affordable setup. Since the Tube MP does have a little bit of its own noise, I tested the MW12 with and without it. I monitored everything first

through a pair of inexpensive Sony headphones and then through an M-Audio BX8 speaker set.

### TESTING: 1, 2


The next step was to record something and see how it stacked up against previous recordings made with the same gear using other interfaces. In the only quiet place available, the bathroom, I recorded some tracks with an old mandolin and a Garrison G20 acoustic guitar. With the Beta 87 connected directly to the channel 1 XLR input, I set the channel 1 gain knob, fader and the master volume to the recommended levels. There was very little noise, but the signal was weak. To get a usable signal without an outside preamp, the controls needed to be cranked, which introduced enough noise to make me grimace a bit. The problem, I later discovered, was the ASIO driver setup (on a PC only). For the MW series mixers, the computer output needs to be set at 100 percent. After discovering this, I re-tested the board with my computer volume output set to high, and suddenly the preamps worked better—much better. Now I had plenty of headroom without the Tube MP. This isn't really a drawback, but something to get used to if you're used to using straight interfaces that run independently of the operating system's sound settings. Since the MW series was designed to be a plug and play item, this step was necessary. Yamaha covers this in its troubleshooting guide, but the company should probably have it as a step in setting up. After this adjustment, I recorded straight into Ableton Live 4 without any trouble.

Comparing older recordings using the Tube MP with an Edirol UA-25 and a Tascam US-122 audio interface, the MW12 was noticeably quieter. However, while the difference between 48 and 96 kHz is slight, it can be heard through the pair of BX8 monitors no problem. Given the amount of hard-disk space that most amateur producers have these days, I see no reason not to want an interface that supports 96 kHz. Strictly in terms of audio quality, the MW12 preamps proved themselves more than worthy of their ultralow-noise description (after the computer output adjustment). The MW12 has plenty of transparency and headroom.

### PRODUCTION NOTES

Although the MW12 is a reasonably flexible, low-noise board, 24-bit/96kHz recording is the industry standard, and most software DAWs will support it. If the MW12's 24-bit/48kHz fidelity suits you, then you would do well to check it out.

Despite a couple of disadvantages, the MW12 is an otherwise excellent recording package. The licensed software sweetens the deal and can be used independent of the hardware. Of course, the MW12 can always be used as a stand-alone mixer, so it's still useful if you upgrade to a different audio interface later.

Some may complain that the MW12 uses only USB 1.1 rather than the high-bandwidth USB 2.0. I don't fault it for that. For the stereo signal that it outputs, USB 1.1 is all that is required. USB 2.0 or FireWire would be superfluous on this board unless it allowed you to record multiple tracks at a time, in which case the board would cost much more. For the price and its features, the MW12 is a great first step into the world of recording. 



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