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review



TASCAM DP-02 Digital Portastudio

The Portastudio gets a 21st-Century makeover

BY MIKE METLAY

Anyone who's been involved in audio recording over the last few decades knows TASCAM, which has always been at the forefront of affordable solutions for musicians trying to capture musical ideas at home. The term "portastudio", which many recording musicians still use as a generic name for any desktop recorder, is actually a TASCAM trademark—leading all the way back to the very first cassette 4-tracker in the late 1970s.

Not many people use cassettes any more; the current flavor for desktop recorders is all digital, with random-access storage on a hard disk. Even as computer-based systems rapidly encroach on their old territory, all-in-one desktop recorders are still the weapon of choice for a fair number of our readers. They're easy to set up, easy to use, offer good editing and mixing features, they're portable, convenient, and—of considerable importance to many—they don't crash!

TASCAM's newest Portastudio, the DP-02, updates its predecessor the DP-01 with a sexy new look and upgraded power under the hood. Let's have a closer look.

The box

The DP-02 comes built into a reassuringly heavy steel chassis with a sleek and easy-to-use low-profile layout. Inside that chassis, it sports a digital engine that records one or two tracks at a time, plays back up to eight tracks, and allows for digital editing, bouncing, tracking and mixdown

with internal or external effects, and creation of a stereo master track that is stored with each song. Song data can be burned to an audio CD-R or played back to an external recorder via analog or digital outputs, and the unit offers data backup/transfer via CD-R or to a computer with USB 2.0.

The front panel is laid out with input and mixer controls on the left and recorder/data management controls on the right. Inputs A and B have individual gain pots, track assignment buttons, global phantom power switching, and controls for input effects assignment (see below) and dual mono or stereo recording modes.

Each of the eight playback tracks has its own mixer channel with 2-band semi-parametric eq, one mono effect send, panpot, Rec button (also used with the Shift key to mute tracks), and fader (short throw but smooth). There's a global Effect Return pot with a switch to assign an internal reverb across the effects bus, and the eq knobs control cut/boost at user-settable frequencies.

The DP-02's digital functions are grouped logically into two sets of keys, separated by large cursor controls, a Data wheel, and Enter/Exit (Yes/No) buttons. The upper set controls menu access, track editing, song loading, and other functions you'd normally use when dealing with material you've already tracked or are about to track. The lower set handles punches, markers, rehearsal/loop mode, and transport—the things you need to grab in a hurry while you're making music. There's a small but clear backlit LCD that gives visual feedback for all operations, including a large time display, level metering during playback and recording, edit functions, and so on.

The rear panel I/O reflects the DP-02's status as an old-school analog-friendly recorder with an eye toward digital and computer-based audio work. The two Inputs offer XLR and 1/4" unbalanced jacks (with a Hi-Z Guitar switch on Input A); there's also a mono Effects Send and stereo

Effects Returns, all on unbalanced 1/4", a pair of unbalanced RCA Line Outs (for an external recorder or a pair of monitors), optical S/PDIF Digital Out, MIDI Out (to sync external drum machines or sequencers), and a USB 2.0 port. The front edge of the unit has 1/4" jacks for headphones and a punch switch, and the CD loading slot.

One other jack is worth mentioning: the Stereo Mix jack, a 1/8" TRS jack on the rear panel. This jack is offered as a convenience for recordists who want to add an external stereo sound source to their final mixes upon playback; it sums with the stereo outputs of the machine after they leave the digital domain, and is *not* recorded digitally. Also, the Digital Outs, Line Out, and Headphone Out all share the same mix.

Getting started, going to work

Setting up the DP-02 is straightforward; a novice can find out what needs to be done with only a cursory glance at the manual, and most experienced recordists will be able to figure out what to do and get started recording without even that. Inputs are selected and assigned to playback tracks—just hold down the Assign button for the Input and hit the Rec button for the track you want to record to. If you're in Stereo Mode, the Inputs are automatically assigned to adjacent odd/even track pairs; choosing one assigns the other. Set your gains, hit Rec and Play, and off you go!

The DP-02 allows you to set up Marks to find your way around songs as you work, up to 999 of them. They can't be named, and are always numbered in order (so, for example, inserting a Mark between Marks 5 and 6 causes the new Mark to be 6 and the former 6, 7, 8... to become 7, 8, 9...). Mark positions can, however, be nudged to precise spots using the LCD and data dial. Song positions and location marks can be displayed in absolute time or in bars and beats with a preset tempo—this matches the MIDI Clock and Song Position Pointer data the DP-02 sends out to sync with external gear. You can also work with MIDI Time Code if your external device supports it.

Punching is very easy, with manual and automated modes and a pre-roll and post-roll that can be set up to nearly 10 seconds. Rehearsal modes and looping allow you to practice and nail your punches, and you can always undo your work if needed (see below).

The DP-02's built-in effects processor is a mono-in/stereo-out device that allows you to print recorded input signals to the DP-02 with effects. It's not available during mixdown, and you don't have the option to record with effects and bypass them later to hear the dry signal. This isn't as flexible as one would expect from a higher-end DAW, but works well for capturing basic tracks in building up song ideas.

The effects are subdivided into five input types: Electric Guitar, Acoustic Guitar, Bass, Vocals, and Drums. They include distortions, amp simulators, time-based effects like chorus and echo and reverb, vibrato, de-essing, compression, and some special effects that range from subtle to funky. Each effect has only one adjustable parameter that varies from program to program. They sound good, but aren't the DP-02's strong suit; we think many users will want the flexibility and quality of an external effects processor hooked up to the Send/Return loop, and fortunately this is easy to accomplish.

Editing, mixing, and mastering

The edit suite in the DP-02 covers all the bases, with a standard set of track edit functions, neatly organized. Data can be copied (remaining where it started as well as going to the destination) or moved (leaving silence where it was), and then pasted (covering over any audio that was where the new data is placed) or inserted (moving all subsequent audio later, and

lengthening the track). You can perform all of these operations within one track or from one track to another, as well as insert or overwrite stretches of silence, cut audio out entirely, or clone mono or stereo track pairs onto other tracks.

The DP-02's Undo function is enough to encourage even the most timid recordist to play around without fear. It's easy to access and has a History of operations that can be used to roll back as far as you need to go. We got a chuckle out of TASCAM's apologetic note that "only" 500 steps of Undo are available. Gosh, how *will* we get by?

Once you have your tracks recorded, you can bounce them down to a stereo track pair, freeing up the tracks for more instruments. When you have all the material you need, you then mix down to a stereo Master Track. In the manual, TASCAM separates this process into two operations: Mixdown, which is the adjusting of levels, eq, panning, and effects amounts to your satisfaction (without recording anything, a "rehearsal" of the mix), and Mastering, the real-time operation that results in the finished Master Track.

This process is where you can add an external submix or effects processor to the DP-02's recorded tracks. The DP-02 also has an internal reverb that lives on the Send/Return loop when nothing's plugged in there; it offers up to 5 seconds of reverb time, four basic algorithms, and a nicely smooth sound for beginners who don't yet own a full-on reverb.

Moving data around

Our DP-02 shipped with a 40 GB hard disk. This can be subdivided into two or more partitions to set songs aside for later work (and prevent their accidental erasure), or to divide your work by musical project, etc.

The disk always has a special 4 GB "FAT" partition, which is what the DP-02 uses to communicate with external computers via USB. To copy data in or out of the DP-02, you have to first move the appropriate data into the FAT partition, then put the DP-02 into USB Mode. When in this mode, the DP-02 doesn't record or play audio; it just acts as an external hard disk that appears on your computer's desktop. It can accept 16/44.1 WAV files as tracks for the DP-02's use, or back up entire songs or just Master Tracks, via simple drag and drop. This operation worked seamlessly in our Windows and Mac OS X tests.

The built-in CD burner can make data backup CDs or burn audio CDs via Disk-At-Once or Track-At-Once mode; these operations are pretty straightforward.

Conclusions

We haven't covered all the DP-02's extras, like its guitar tuner or metronome functions, nor have we mentioned the DP-02CF, a less expensive version of the DP-02 that omits the input effects, reverb, and CD burner, and records to CompactFlash cards rather than a hard disk. But you get the idea at this point: this is a good solid system for the beginner who only needs to record one or two instruments at a time, likes the immediacy of bouncing and mixing down tracks to a CD he can share around, and reserves the option of moving his material onto a computer for more advanced editing and processing.

The DP-02 continues the TASCAM Portastudio tradition of placing all the tools a musician needs to get started making recordings in an affordable and easy-to-use package. Thumbs up. 🍷

Price: \$799 (\$499 street)

More from: TASCAM, 7733 Telegraph Road, Montebello, CA 90640. 323/726-0303, www.tascam.com.