

FAST TRACK OF CHAMPIONS

Olympus LS-10 Linear PCM recorder

BY EMILE MENASCHE

OLYMPUS' SMART LITTLE LS-10 Linear PCM Recorder is part of a growing niche of devices that can record both compressed and uncompressed stereo audio using built-in mics. As a group, these digital recorders are incredibly useful for songwriting, band rehearsals and gig recordings, and they work as personal audio-playback devices, too. But how would Olympus, a company better associated with cameras and voice recorders, do at creating a musician-friendly tool? Let's start the answer with a look at the cold, hard data.

FEATURES

MEASURING ROUGHLY 5 x 2 x 1 and weighing just 5.33 ounces (without batteries), the LS-10 is sleek and ultra portable. Its sturdy aluminum case seems designed to withstand life in the field, an advantage over some of the LS-10's plastic-bodied competition. For convenience it runs on a pair of AAs (alkaline, lithium, or NiMH batteries all work), and for indoor use you can purchase the optional power supply.

The LS-10 can record and play back files in PCM (.wav), MP3 and WMA formats. PCM mode delivers the best sound quality, with sample rates that include, at the low end, the CD-quality 16-bit/44.1kHz and, at the high end, the pro-audio-level 24-bit/96kHz. The two built-in condenser mics, arranged in a 90-degree stereo pattern, record to either the 2GB of built-in flash memory or to an optional SD card (the LS-10 accepts cards up to 8GB). There are also separate stereo mini jacks for line-level signals and for outboard mics, although I restricted my test to the onboard condensers.

Other connections include a 1/8-inch stereo headphone jack, a high-speed USB connector for hooking up to a computer for file transfer and a jack for the optional wired remote. When the headphones are not plugged in, you can monitor audio via tiny stereo onboard speakers. These don't put out a lot of sound but are a handy addition. Other features include built-in reverb and stereo-image effects (for playback), an input audio limiter and a Zoom Mic effect, which uses digital technology to focus the directional scope of the mics.

The Olympus boasts a backlit amber LCD display that's very easy to read. I won't go too far into the operating system, but it's worth noting that it's



OLYMPUS LS-10 LINEAR PCM RECORDER

LIST PRICE: \$449.95

MANUFACTURER:

Olympus America, olympusamerica.com

RECORDING FORMATS:

Linear PCM (Pulsed Code Modulation), WAVE, MP3 (MPEG-1/MPEG-2 Audio Layer 3), WMA (Windows Media Audio)

RECORDING MEDIA:

Built-in 2GB NAND Flash memory, SD Card (512MB to 8GB)

MAXIMUM RECORD

TIME: (Using built-in 2GB memory) Linear PCM, 3 hours 10 minutes; MP3, 35 hours 35 minutes; WMA, 69 hours 35 minutes

CARD FORMATS:

SD, SDHC

PC INTERFACE: USB

OS: Windows: 2000/XP/VISTA; Macintosh: Mac OS 10.2 or later



Two high-quality microphones are fixed in an XY pattern for accurate stereo representation, but an onboard "virtual microphone" system lets you set produce a more directional pickup pattern.

painless to organize recordings on the machine and to transfer data to and from a computer via USB. As for battery life, Olympus claims 12 hours of Linear PCM recording time at 16/44 using alkaline batteries, and 16 hours with Ni-MH batteries.

PERFORMANCE

THE LS-10 IS both easy and fun to use. Its controls are nicely arranged and musician friendly. For example, there are physical switches for mic sensitivity, a low-cut filter and a rotary control for mic input level. (You can also set the Olympus to Auto Level and use the onboard limiter to govern input gain.) These controls make it much easier to get an appropriate level, especially when combined with the easy-to-read LED meters and the red peak LED, which sits smack in the middle of the stop and record buttons. These two important buttons are separate from the large multifunction button that controls playback and menu navigation, so you can easily use the unit in the dark and with one hand. You also have one-button access to menu settings, file navigation and looped playback. You can erase a file with a dedicated button (it confirms before erasing, so it's safe), and there's even a programmable button that you can assign to any of a number of functions.

Built-in mics will never compete with a really good set of dedicated condensers, but the LS-10's did a more than credible job on some acoustic guitar tracks, grabbing the guitar's bass and midrange nicely and sounding only a little overly bright in the top end. Tracking at the 24/96 setting to the internal memory produced an impressive stereo image, both with and without the onboard reverb. The LS-10 has nothing in the way of EQ, but if you have a computer, it's easy enough to transfer the recordings for further processing. (To that end, the Olympus comes with Steinberg's Cubase SX 4 LE software.) With a little tweaking, these tracks would be fine in a soundtrack or CD project. Recording to MP3 format yielded good sound quality, as expected.



THE BOTTOM LINE

I FOUND THE Olympus LS-10 incredibly convenient for those moments when I get a burst of musical inspiration and need something to quickly and easily capture the moment. While it lacks features found on competing units, such as multitrack recording, onboard metronome and advanced effects, it makes up for those omissions with a perfect balance between capability, sound quality and ease of use. When creativity knocks, I've been reaching for it first. ✨

PRO	CON
SLEEK DESIGN; STURDY CASE; EASY OPERATION; EXCELLENT SOUND; SMART FILE HANDLING; RUNS ON RECHARGEABLE BATTERIES	NO MULTI-TRACKING; CAN'T BE USED AS COMPUTER AUDIO INTERFACE DESPITE USB PORT; POWER SUPPLY NOT INCLUDED