Sound Devices 744T

Portable location recorders took a shot in the arm with the adoption of hard drive media and a variety of interpretations of the concept are now freely available. NEIL HILLMAN says he's now seen a box that he believes hits all the right buttons.

THIS IS A UNIQUE and ground-breaking opportunity; quite simply, you are about to experience an historical first. We bring you the original opportunity to choose between an MP3 compressed review or, an uncompressed .BWF version.

As fellow audio-professionals, I'm sure we share the same reservations about how prevalent this lossy-compression, iPod, pea-pod, eezy-peezy-lemon-squeezy mentality is becoming; where data that contributes to a more complete experience is freely discarded, lost for ever, by a process that willfully short-changes our aural and neural pathways in exchange for an overall smaller data package. But, *Resolution* readers have a right to expect the here-and-now; and so, in the spirit of the download-generation, you now have two formats available.

THE SOUND DEVICES 744T.MP3 (MP3:276B)

<TOC read> A portable, 4-channel, hard disk/Compact Flash audio recorder and playback device with built-in timecode, silent mic amps, bomb-proof limiting and super-model slim styling. You want one, you need one. You do.

THE SOUND DEVICES 744T.WAV (BWF:8287B)

<header chunk> Sound Devices has delivered an amazingly compact yet feature-rich package with the SD744T, which by its introduction redefines our expectations for a multichannel digital location recorder; both in size and specification: either in a documentary, over-the-shoulder context, coupled to an equally-sized Sound Devices mixer, such as the 4-channel SD442; or on a drama recordist's production-mixing trolley, sitting across the outputs of a larger, more comprehensive mixer.

<mext chunk> The 744T records its 4 audio inputs primarily to an internal 2.5-inch, 5,400rpm hard disk

conforming to the ATA-5 standard, allowing any 1.8 or 2.5-inch conforming drive to be substituted at a later date if necessary. Addressing is supported up to 2Tb, but it would be difficult to see an application for such sized storage, short of an under-cover surveillance service of Watergate proportions. In fact there is a more than passing resemblance to the recording device that figured so pivotally in the Watergate investigations — the beautiful Nagra SN. This miniature precision analogue stereo tape recorder from Kudelski's 'Série Noire' was originally ordered in the 1960s by President JF Kennedy for the American secret services and was even taken to the moon on an Apollo mission.

Carefully protected within a foam housing, the 744T's FAT-32 formatted drive is capable of withstanding a great deal of vibration and shock. In fact the whole build-quality of the device suggests a lunar mission could be well within its capabilities. Usefully, the ability to write to an external Compact Flash card — simultaneously while writing to the internal disk if required — adds a reassuring 'belt' to its figurative pair of 'braces'. There should never be an occasion when a recordist gets caught with his pants down due to a hostile working environment; or micro-gravity (*Oh! Ed*).

The supplied internal disk capacity is 40Gb for uncompressed recordings of around 132 track-hours at 16-bit/44.1kHz or 120 track-hours at 16-bit/48kHz. This falls to around 80 track-hours for 48kHz/24-bit, 40 for 96kHz/24-bit and 20 track-hours for 192kHz/24-bit recordings. A documentary recordist working in 4-track mode at 48kHz/16-bits could expect to see some 20 hours recording; a respectable amount of time for a device powered either by mains or inexpensive, Sony-compatible, Li-ion camcorder batteries.

The SD744T can also record and playback MP3 compressed files, with a corresponding increase in capacity. These 2-track only recordings vary between a gargantuan 1,422 hours at 64kb/s (almost 2 month's worth of continual recording) and a 'higher-quality' 284 hours at 320kb/s on the supplied disk.

Any proprietary CF type I and II cards are suitable for the 744T, and data can be read or transferred quickly and easily from the device through a 6-pin FireWire socket compatible with Windows and Mac. Using Windows Explorer or Mac Finder, the 744T conveniently mounts as a local drive.

<bext chunk> Of the four analogue or digital inputs to the 744T, only inputs 1 & 2 are on XLR connectors, mic/line selectable, with switchable +48V phantom power and variable fader control. These two rotary controls sit on the front face and may be depressed into a locked position to prevent any inadvertent adjustment. Inputs 3&4 are designed to be fed typically from a mixer, and remain at line-level with a line-up adjustment in 0.1dB steps between -6 and +18dBu; easily accessed through the set-up menu.

The 744T accepts balanced AES-EBU3 signals on its XLR connectors, with AES pair 1 & 2 presented through XLR input 1 and AES pair 3 & 4 through XLR input 2. Analogue inputs 3 & 4 are on Switchcraft TA3 connectors and will accept balanced or unbalanced

signals, while digital inputs 3 & 4 are available on BNC connectors as an AES3id or SPDIF signal with the recorder automatically detecting the signal type. A digital signal at the BNC connector will override an analogue signal present on the XLR inputs, although through the set-up menu it is possible to input analogue audio while using the AES3id input as a digital clock source.

Any input may be routed to any track, and multiple inputs may be routed to a single track to create a mono-mix. A 4 x 4 matrix of blue LEDs on the front panel make it easy to see where each input is routed to, and in fact, a quick scan by a new operator's eyes across the front panel, soon establishes a confidence in the performance and status of the recorder.

Headphone monitoring is comprehensive across the inputs, tracks and post-record tracks, with 10 preset routings including an MS decoding matrix selectable for either of the stereo inputs, and a further 10 user-defined combinations available through the easily navigated set-up menu. A form of confidence monitoring is also possible, allowing the internal disk, or the CF card, to be listened to while the machine is in record; although the record buffer introduces a delay of up to 12 seconds. Operating the device is pleasingly direct — if you can work a tape recorder, you can record and playback from the SD744T.

Metering on the 744T is similar to that found on other Sound Devices equipment: bright, high-intensity LEDs with selectable ballistics between VU and Peak, and a non-linear metering scale differentiated by different coloured lights. From -50dbFS to -40dBFS, each LED segment equates to 10dB; from -40dBFS to -12dBFS each segment equals 2dB, and from -12dBFS to 0dBFS each LED represents 4dB. Set to VU plus Peak Hold it doesn't take too long to forget white numbers on a black background, and a needle swinging wildly between 1 and 7.

The mechanics of the set-up menu are straightforward for any recordist familiar with working a time code and file handling device; and satisfyingly un-daunting enough for those who aren't. While there are many permutations available, variables like bit-depth and sample rate are easily arrived at and several 'soft key' short-cuts are usefully given in the user's manual for the most frequently adjusted settings.

The 744T's file-handling is a standard FAT-32 Directory/File hierarchical architecture; formatted as a single volume, with the recorded files being placed into a master directory called 'Sounddev'. File names are made up from four elements: Scene Number ('Sxxx', user-set), Take Number ('Txxx', auto-incrementing), mono file designator ('1-4' if a mono file is selected), and the file extension (either .BWF or MP3). A 'Daily Folder' sub-directory may also be created if required, so on power-up that day's recordings are automatically placed into a correspondingly time-stamped folder.

<data chunk> The Sound Devices SD744T, a compact 4-channel recorder with an obligatory — and comprehensive — time code capability, has a design-philosophy that makes it the worthy and natural successor to the now elderly Fostex PD4 or HHB PDR1000TC time code DAT machines; both of which became the recorders of choice for a whole generation of sound recordists and sold by the container ship-full. When those models went out of production some time ago, with Fostex and HHB opting to change their recording formats and modernise their recorder range with ones of greater size, weight and cost — paving the way for an increase in performance and overall data-capacity — a hole was left in the market for sound recordists who needed something as simple and as easily portable as those earlier machines. Fostex responded with their attractively-priced and highly-capable 2-channel CF recorder, the Fostex FR-2; but this middle-ground, middle-budget market has been blown into disarray by the emergence of the Sound Devices 744T.

Compact yet capacious, with its 4-track flexibility the 744T has put the cat among the pigeons in the world of location recorders. If you are a professional location recordist, then by default you are in the market for this highly portable, hard disk/Compact Flash audio recorder and playback device. With its built-in time code, silent mic amps, bomb-proof limiting and super-model slim styling, you want one and you need one. You really, really do. ■

PROS Priced strategically between its competitors, the SD744T's value for money at UK£3,700 — like its size and styling — is highly attractive.

CONS Call me old-fashioned, but in the absence of a PPM I'd still prefer an LCD peak-hold bargraph as opposed to the aurora borealis nature of the Sound Devices' trade-mark metering. My retinas would appreciate it too.

Contact

SOUND DEVICES, US
Website: www.sounddevices.com
UK, Shure Dsictribution: +44 208 808 2222