

# HHB Portadrive PDR 2000

Eagerly awaited, this portable hard disk recorder has helped to define what the face of future location recording might look like. **NEIL HILLMAN** scrubs up a treat and applies Ockham's Razor.

**T**HE GLOVES ARE OFF, the lines have been drawn and the talking has stopped. Two of the major location-acquisition recorder manufacturers, HHB and Fostex, are engaged in a format war — the battle of the differing media — out of which can result a de facto industry-standard recorder. A whole new generation of Features Recordists will grow alongside the development of this supreme-machine, as it is refined to ever more fluid, flexible and futuristic heights...Actually, if I'm honest, it's more of a skirmish. Well, to be truthful, even that might be stretching the point a bit too far.

The flagship products from HHB and Fostex — the PDR2000 and the DV40 respectively — probably have more in common than I may have initially given you the impression of; and I may have over-egged the pudding just to get your attention.

However, what we do have on offer with the HHB Portadrive PDR2000 entering the fray against the Fostex DV40 and its more nimble little brother the PD-6, are highly capable, yet ultimately different, flexible and sophisticated alternatives to what is essentially the same dilemma. While the Portadrive PDR2000 is heralded by HHB as the answer to 21st Century location recording needs, it may well be that a 14th Century English scholar, and the tried and tested technology of a razor, may today provide us with all that we need as means of determining the suitability of the equipment in question.

The HHB Portadrive PDR2000 is an 8-channel, 6 XLR-input, 24-bit, 96kHz, removable 40Gb hard disk, location sound recorder, clearly built to exacting standards, and clearly capable of surviving the rigours of a mobile life. The Portadrive can also record simultaneously to an 'optional' DVD-RAM back-up drive, the 'PDRDVDBU', which unless you are awash with 40Gb hard drives that you are happy to send into a studio's rushes system, will be a nearly £600 necessity rather than an option. I would venture that it will be through this medium that most of the output from a Portadrive will find its way into post.

The overview of the PDR2000 breaks down most easily into three separate sections: the recorder with its inputs, outputs and mixer functions; its data management at source; and the means of extracting the recorded files and data.

The 'mixer' functions are divided into the four operational control surfaces of the device, and the Portadrive carries all the usual facilities a recordist would reasonably expect.

The right-hand side panel houses the six balanced female XLR mic/line inputs, offering switchable 48V phantom powering, in a row along the bottom edge.

Assignable to these inputs are an HPF, Limiter, Delay and Phase Reverse. Above these are a further six Cannon sockets delivering Analogue Out Left and Right, Aux Out Left and Right, AES out and a 5-pin 2-Channel Return feed. A 25-pin D-sub connector, mounted vertically, handles 8 channels of AES digital inputs and outputs. A third, top row provides a 1/4-inch headphone socket (which breaks the in-built speaker feed), a 5-pin Lemo socket for timecode interfacing, Word Clock Out and Sync In on two BNC connectors, and two RCA phono connectors for SPDIF digital I-O.

The left hand side houses the NP-1 style battery compartment — up to 2 hours per battery can be expected from a Lithium-Ion cell — and the removable drive housing. This is reassuringly positive to locate and lock, as well as seemingly well protected from the elements and shock. The DC connector is a 4-pin Cannon, and further sockets are available for USB 2.0 and Ethernet connections, a PS2 external keyboard connector, parallel remote and RS422 9-pin connectors, and a SCSI-2 socket for attaching that important DVD back-up drive.

The front face most noticeably carries the 18-segment, vertical bargraph metering, and the six rotary faders with their individual yellow pin-head lights that dance around the fader periphery in 7dB steps as the fader is operated. Peak and Limiter activity are also displayed around the meter window area, as are the selected channel Record Arm and channel Clip indicators; the latter's duration programmed to match the duration of the Peak Hold.

Four buttons sit underneath the meter: Input — when selected the meter displays the levels present at inputs 1-8; Busmix — when selected the meters show inputs 1-6 and the bus mixers output. The bus mix provides a mono or stereo mix to disk (internally or

externally) and may be an alternative 'dailies' mix source. When Track is selected the meters will show the levels of tracks 1-8 on disk and when Output is selected the meters show the main LR output signal. A second press of this button shows the Aux LR signal on the meters and a third push shows the output mixer's sources 1-6 and the stereo output.

If the headphone preset is set to 'follow meters' the monitoring feed is slaved to what you can see. So, in the same order as above, the operator would hear a stereo mix of inputs 1-6, the stereo output of the bus mixer, a stereo mix of tracks 1-6 on disk, and, in the case of the 'Output', first push is the main output signal, second push is the Aux output signal and the third push reveals the stereo output of the Output mixer.

M+S decoding is available across the three stereo input pairs, and each channel may be soloed, via a button underneath its fader, ganged to its twin (1-2, 3-4, 5-6) and stereo LR routed accordingly to the bus or output mixer: 1,3,5 to Left, 2,4,6 to Right. The other notable front-face component is the record knob; a curiously low-tech rotary switch that somehow seems out of keeping with the rest of the machine and certainly lacking in the positive action or gravitas you might expect when dropping in to Record. In use I found it so lacking in presence that time and again I looked in vain with expectant fingers to the transport buttons on the top face for a 'Play-and-Record' key-combination.

The basic mixer preset adjustments to channel configuration, routing, pairing and so on, is achieved through straightforward menu and key prompts, shown on the top mounted screen. This screen in conjunction with four cursor keys and a data wheel, is used to access the Input, Busmix, Track and Output variables as well as providing access to the Disk, Session, Timecode and Set Up parameters.

In terms of recording, files and data may be created/saved either in the increasingly universal AES31-3 BWF, or as SD-II information for direct import into the Pro Tools V5 format, with a comprehensive Metadata capability for 'scene', 'take' and 'comments' to accompany the audio itself.

The disk hierarchy structure is straightforward



enough for anyone vaguely familiar with disk-navigation. FAT16, FAT32 and HFS formats are supported, and all necessary format and file commands are accessed on the PDR2000 itself, through the top face screen and the associated dedicated Disk button and subsequent soft keys. Once looking at the disk structure on-screen, easily distinguished icons differentiate between: Session (the folder housing the collection of recordings making up a project or that day's work); Scene (the multiple scenes that will make up that day's session); Take (a folder created every time a new recording is made, with one folder per track enabled for recording); Audio (the raw recordings made in a session); ADL (the AES31-3 interchange file that allows the Portadrive sessions to be imported directly into the timeline of a suitable DAW); and Folder, which is the container for sessions, raw recordings or sub-folders containing further sessions and recordings. Alongside the different file types is the last modified date information.

With the Disk option displayed on screen, soft keys access Disks to take you back to the disk list page, Copy and Delete enable this of highlighted items, New to create a new session or folder, Close to close folders, and Open to open a file. When the selected file is an .ADL file, pressing open will activate the associated session, and what was the current session will be auto-saved and closed.

Back in the studio, retrieving the data is a breeze, as it should be, with recordings either transferred from the PDR2000 itself through its Ethernet or USB ports, or through the optional PDRDS drive docking station. In terms of capacity, the 40Gb drive offers at one end of the spectrum 2-track, 48kHz, 16-bit recordings for around 60 hours, or at the other end impressive 8-track, 96kHz, 24-bit recordings for a fraction under 5 hours.

There will, no doubt, be two schools of thought and each with its own set of adherents; either to the DVD technology of Fostex's DVD 40 and/or the PD-6 route, or the hard drive of the Portadrive. Here is where the application of Ockham's razor comes into its 21st Century own.

Back in the 14th Century, at about a quarter past 4 in the afternoon, William of Ockham uttered the immortal words: 'Pluralitas non est ponenda sine necessitate!' 'Ockham's Razor', as this statement came to be known, translates as 'entities should not be multiplied unnecessarily'. This principle can be interpreted as 'Keep It Simple!'

Head-to-head, technically, the two systems from HHB and Fostex are impeccable and operationally it would only be a short period before any of us would be completely at home with the individual foibles and quirks of either machine. With its end-of-the-day easy rushes hand-over coupled with the economy of its principle recording medium I am drawn logically to the Fostex DVD methodology. But if we are completely honest, do we actually buy on straight logic alone?

There is also the question of confidence: does the device inspire it in the operator?

HHB is not forging new ground, or going it alone, along the hard disk route —Zaxcom with the Deva was first and there's also Aaton with its other-worldly designed Cantar-X. Notably, by the presence of the Cantar's on-board and integral CDR/DVD+R, they acknowledge that hard disk recorders essentially do require the convenience of the cheaper rushes option provided by DVD.

Are these unfair comparisons to draw between the PDR2000 and its rivals? I don't think so; and it is interesting to see that the PDR2000 is priced between Fostex's two cheaper DVD machines and the acutely

more expensive Cantar-X and Deva-V. In some respects, the PDR2000 mirrors the early Deva and is clearly highly capable, yet somehow not yet fully-formed ergonomically.

Location recordists by their very nature are as individual as these various recorders are and we wouldn't want it any other way. And there clearly is as yet no definitive standard. The PDR2000 is a welcome addition to the party and brings with it its own personality. All of the devices currently on offer are subject to constant development and any potential purchaser should be looking at the bigger picture. With so much on offer we really are spoilt for choice. Try it for yourself. ■

**PROS**

It's strong; it's robust; it's bullet-proof; a 21-hour session failed to phase it, although it knackered me.

**CONS**

The development money clearly went on the bits you can't see — the styling is a little disappointing.

**HHB COMMUNICATIONS, UK:**

**Tel:** +44 208 962 5000

**Website:** www.hhb.co.uk