

Pioneer DVR-520 ♦ £600 (Approx) ♦ 01735 789500 ♦ www.pioneer.co.uk

Box of dubbing delights



Martin Pipe digs into Pioneer's new HDD/DVD recorder, and asks, evolution or revolution?

It took nearly two years for Pioneer to replace the venerable DVR-7000 DVD recorder – its first for the UK market. One of the two machines that replaced it, the DVR-5100, squeezed an 80GB hard disk (HDD) into its slender body. Here at *HCC*, we're sold on this 'dual' approach, not least because you can accurately edit your favourite movies and TV programmes before dubbing them onto DVDs.

Partnering a HDD with Pioneer's DVD-RW format is particularly logical. One of its two recording formats, video, gives you fair compatibility but practically no editing functionality. The other format, Video Recording, is edit-friendly but is recognised by very few DVD players.

Pioneer's HDD editing gives you VR-style editing, but the results can be copied to a video-mode DVD-RW. The newly-prolific company will also be promoting budget models without internal mass-storage, but there will be an upmarket unit too, with not only HDD but also HDMI connectivity. However, the first models of this new range are both equipped with HDDs.

The DVR-520 is equipped with its predecessor's 80GB, permitting as much as 102 hours of recording to be made in the lowest-quality mode, while the DVR-720 doubles up at 160GB – making it the most capacious HDD/DVD recorder around at the moment.

A quick tour

The DVR-520 is low-profile, standing a mere 59mm tall. On its elegant front panel are the barest of operating controls and a somewhat-sparse fluorescent

display. In addition to composite/S-video and stereo audio terminals, is a bi-directional i.Link input. Not only can you dub from a digital camcorder to disc with minimal loss of quality, but you can go the other way too – provided that the original recordings aren't copyrighted.

Connectivity is a mixed bag. The highlight being the RGB Scart input. The Scart can also be switched to support S-video. This apart, connectivity is as bare as the front panel. The discrete rear-panel inputs of previous Pioneers are absent, and the only digital audio output is an optical one. There's also no component output, progressive-capable or otherwise.

The hardware may steer towards the basic, but Pioneer's comprehensive on-screen menus represent a stark contrast. Amongst other features, the display configures TV standards, languages and DVD-RW formatting. No control over audio recording-level is offered, but the levels of each input can be pre-set to avoid annoying jumps in recording volume and possible distortion.

Inherited from the previous Pioneers

RATINGS

Highs: RGB input, back-up, editing potential
Lows: No component output, can't define DVD thumbnails

Picture	★★★★★
Sound	★★★★★
Features	★★★★½
OVERALL	★★★★★

are a bank of picture presets that affect the tuner and AV inputs – and thus recording. Adjustable parameters include colour level, noise reduction and detail. As with Pioneer's DVD players, similar adjustments are available for disc replay.

As far as ease of use is concerned, the 520 cannot be faulted. A disc navigator forms the basis of accessing your own DVD/HDD recordings. It's basically identical to the 5100's, only a good deal faster. As with the 5100, your HDD recordings can be organised into one of four groups. A good idea, with all that capacity at your disposal!

For your DVD media, there's a 30-disc history function that will remember the first three recordings on each. The four preset recording settings are joined by a 32-step MN (manual) mode that allows

LAB REPORT

PLAYBACK

	Excellent	Good	Average	Poor
Video jitter 5ns		✓		
Signal-to-noise ratio:				
Composite (-71.9dB)		✓		
S-video (-75.9dB)	✓			
Chroma				
AM (-75.5dB)	✓			
PM (-71.1dB)	✓			
Chroma crosstalk (-55.1dB)		✓		
Freq response@ 5.8MHz				
Composite (-0.6dB)	✓			
S-video (-0.7dB)	✓			
Audio jitter (547.0ps)				✓
RECORDING				
Chroma				
AM (-56.6dB)	✓			
PM (-57.7dB)	✓			
Frequency response@4MHz	✓			
Fine (-0.84dB)	✓			
SP (-0.91dB)	✓			
Frequency response@2MHz				
LP (-0.64dB)		✓		
EP (-0.54dB)		✓		

DISC COMPATIBILITY

DVD-V	●	Video CD	●
DVD-A	●	Super Video CD	●
SACD	●	DivX	●
CD	●	DVD+R (play)	●
MP3	●	DVD-R	●
WMA	●	DVD+RW (play)	●
JPEG	●	DVD-RW (Video)	●
HighMAT	●	DVD-RW (VR)	●
CD-R	●	DVD-RAM	●
CD-RW	●		

FEATURES

Specifications: 160GB hard disk, Nicam tuner, 32-event/1month timer with VideoPlus/PDC, OTR, easy timer, T-V Link, 4 record modes (1 to 6 hours) and 32 MN (manual) steps, 2-channel 256kbps Dolby Digital audio recording (linear PCM for Fine), input video adjustments, auto audio record levels, bi-directional i.Link, disc history, recording protection, auto 10 or 15-min chapter marking, high-speed copy, one-touch copy, disc back-up, OTR, optimised recording/dubbing, playlist editing (HDD/DVD-RW VR only), satellite control, chasing playback (HDD/DVD-RW VR only), auto-install, Disc Navigator, 30-disc history, playback video adjustments, commercial skip, slow-motion, still, frame advance/reverse, resume, repeat, random, multi-brand TV remote.

Connections: (Rear): Stereo audio out, composite/S-video out, 2x Scart (composite/S-video/RGB in/out, standby-loopthrough), aerial in/out, optical digital out, control in. (Front): i.Link, composite/S-video and stereo audio inputs.

Dimensions: 420(w) x 59(h) x 339(d)mm **Weight:** 4.2kg



'As far as ease of use is concerned, the 520 cannot be faulted'

you to optimise recording quality so that it reflects the source material. If you're using the HDD, or a 2x/4x DVD-RW formatted in VR-mode, simultaneous recording and playback is available.

Like that other well-known HDD-based product, Sky+, you can start viewing a programme that hasn't finished recording, or even watch previously recorded media. Programming the 32-event PDC-equipped timer isn't quite as easy as it is with Sky+'s EPG-based system, but it's straightforward enough. If you don't have TV listings with VideoPlus codes, use the easy-timer with its innovative time-line programming.

The master edit

And so to the editing functionality. Both HDD and VR-mode DVD-RW use a 'non-destructive' system – in other words, the original recordings are left intact. With this playlist system, the running times of

each entry can be modified. Playlist titles can also be merged or divided.

Also possible is 'destructive' editing, in which the recordings themselves are physically-altered – just as well, then, that an undo feature is offered. The most useful destructive-edit you'll encounter is the removal of adverts and other superfluous material. Demarcate these unwanted sections with chapter-marks during playback, and they can subsequently be deleted, a process that will also release disk space. In video mode, the only editing functions available are titling and erase, both of which are also possible during VR/HDD operations.

Recordings, edited or otherwise, can be copied to DVD media – speeding up the process are neat features like a one-touch button, and copy lists for transferring multiple-recordings in one go. If you don't want to change the recording mode, then lossless high-speed

copying is at your disposal – a 1-hour SP recording will fly to one of the latest 8x DVD-Rs within 4 minutes! If you're prepared to wait, you can use a recording mode that differs from the original – ideal for transferring multiple titles to a single DVD-R. Downsides? This copying has to be done in real-time, and recompression means there will always be some loss of quality. Combine the latter with the optimised feature and the 720 automatically optimises the recording bitrate so that everything's accommodated on one disc.

Providing ample compensation is the excellent 'back-up' function, which we first met on the 5100. This will speedily copy a finalised DVD-R or DVD-RW, complete with menus, to the hard disk. The image thus created is then dubbed onto a blank disc, which you're prompted to insert. The result is effectively a clone of the original disc, recorded at up to 8x.

As for performance, the 520 delivers the goods as far as DVD replay is concerned. Recordings also fare well, pictures in the full-resolution Fine (1hr. per 4.7GB disc) and SP (2hr.) modes are virtually-indistinguishable from the original source. I found that, in the optimised-dub mode, you could squeeze

around 2 hours and 20 minutes of full-resolution video onto a single DVD-R. In the LP (4hr.) and EP (6hr.) modes, horizontal resolution is halved and is thus closer to VHS – but with the digital advantages of far less noise and more vibrant colour. Artifacts are pleasantly minimal, even in EP.

The two-channel audio system cannot be faulted, its own recordings and playback of commercial DVDs being exemplified by abundant texture and impeccable dynamics. Test recordings of classical music revealed that the uncompressed PCM mode available during 'fine' recording was a tad more transparent than the usual Dolby Digital.

Conclusion

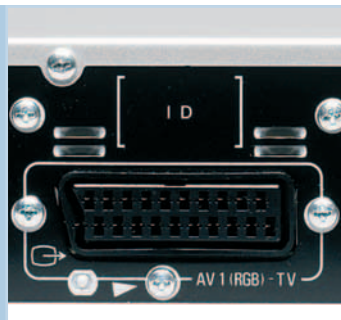
The DVR-520 can be considered an excellent digital recorder, but more an evolution of the old 5100 than anything radically new. It's gratifying to see that our requests for an RGB enabled Scart input have been heeded and the versatility of the unit is second to none. Combine that with good built quality and you've got a DVD recorder able to challenge the best of the rest ■



The only digital audio output is an optical one



Bristling with buttons, the remote is rather complicated



The Scart sockets can accept and deliver an RGB signal



The barest of operating controls make for a stylish fascia