

# CB Electronics PD-1

Despite its best efforts the virtual world has been unable to replace certain physical controllers. **ROB JAMES** sticks his oar into a paddle controller for the virtual world.

**FILM PRODUCTION IS** a wonderful melange of tradition and state-of-the-art technology. A glance at the credits of any contemporary film demonstrates this perfectly. Terms such as Best Boy, Alligator Wrangler and Color Timer sit cheek by jowl with Digital Modeller and Render Wrangler. Often old job titles are recycled for new technology and you can view all this as charming eccentricity or as a kind of almost Masonic obscurantism. The sound department is no exception.

The industry is sometimes accused of being slow to adopt new technology but this is a calumny. In truth, film people are delighted to welcome new technology that improves the end product and/or productivity. All too often disappointed purveyors of high tech solutions fail to understand that many film operating practices have evolved for very good reason.

Like any mature industry film has its own buzz vocabulary. Despite the wholesale adoption of digital technology many of the older terms and ways of working are still very much in evidence. In dubbing theatres (re-recording stages) Pec-Direct monitoring control is an obvious example. PEC is the acronym for PhotoElectric Cell, the replay head on an optical sound camera. These have not been used for mixing in decades but the term has remained, as has the control paradigm. Pec-Direct is just another way of saying Playback-Direct or Disk-Direct.

The process of film mixing, whether to magnetic film, multitrack tape or, as is almost universally the case today, some form of hard disk recorder requires fast access to record and monitoring control over a large number of tracks and track groups.

It is far from uncommon to find audio elements spread across several hundred tracks in a single scene. These are mixed down to multitrack stems that are

summed to produce the mix. Thus the monitoring section has to be a big multi-bus-summing mixer in its own right. Stems are generally up to 8 channels wide and 8 stems are often used for a total of 64 record tracks. This means 128 channel feeds to the monitor mixer, 64 direct and 64 playback returns.

Today, it is a great deal more cost-effective to do all the summing and switching inside a DAW or DAWs. However, the hands-on Pec-Direct and record control is arguably still best undertaken with traditional, internally illuminated paddle switches.

This is exactly where the UK£2200 (+ VAT) CB Electronics PD-1 fits into the scheme of things. It is

a dedicated serial controller for Pec-Direct and Record with two rows of internally illuminated paddles and three rows of buttons, familiar from other CB kit.

PD-1 shares the new house style first seen on the UR-422 Universal Remote Control. The entire case is constructed from heavy gauge brushed stainless steel. The fixed two-line LCD display shows white characters on a blue background. As with the UR-422 the front panel overlaps the 'box' by a few millimetres so installing the unit into a console panel will be a breeze. Eight control 'channel' strips and the master strip have an identical complement of buttons and paddles. Pec-Direct is at the bottom followed by Rec On — Rec Off. Above, the three buttons are Safe/Ready, Mute and Solo. On the left a further three buttons switch between Stem, Global and User Modes, Assign tracks to Stems, Stems to Global and User Groups and give access to, and navigation of, the set-up menu.

Power supply is a compact in-line block and the PD-1 comes with the excellent USB-RS422 interface included. (See panel)

I used Pyramix 5.1 as the target DAW and the PD-1 immediately recognised it. With a properly set up Pyramix project the unit can be set to automatically configure itself.

It picks up track names and also uses track group names as stem names and makes other appropriate settings. (Pro Tools is catered for in a similar manner and Nuendo will follow shortly when the next version is released.)

In operation, PD-1 quickly becomes intuitive. In a Global or a User mode, pressing the Stem button followed by a Stem record paddle expands that stem across the surface. A second press on Stem returns to the previous mode. Master controls apply to the level currently displayed. The precise features vary according to set-up and the device being controlled.

Suffice to say that most operating styles can be accommodated and software development is ongoing as users come up with new ideas.

With highly flexible set-up options the PD-1 will be equally at home in a large multi-operator environment or in a small tracklaying/premixing room. It can 'play nicely' alongside RS422 machine controllers and will also control dedicated hardware recorders. A PC set-up applet will be provided that will also enable user set-ups to be saved and recalled at will.

If you've ever wondered what on earth those funny paddles were for or what all the fuss is about this is the ideal opportunity to find out. For experienced users who miss the logic and efficiency paddles provide in the brave new world of the DAW, the PD-1 is an obvious answer. ■



**USB422 DUAL RS-422 USB INTERFACE** — Until now, using a PC or Mac with RS-422 Sony 9-pin P2 protocol devices has often been a rather painful experience. The available converters required a lot of fiddling about with driver and com port settings and, at least in my experience, have always been a bit finicky. The UK£120 (+VAT) USB422 only needs drivers to be installed and then it just works. Of course, there are adjustable settings for particular situations but this is the first device I've encountered of this type that worked first time. As supplied there are two RS-422 ports, one Device Input, one Controller Output. Four LEDs indicate Tx and Rx activity on each port. The Input can be re-configured as a second Controller output via internal jumpers. The USB422 is housed in a compact extruded alloy case with two 9-pin D-Sub sockets and a 4-pin USB socket for the USB cable supplied. A video reference BNC input is available as a £40 (+ VAT) option. The unit is powered from the USB port.

**PROS** Cost effective; simple; it just works. **CONS** You have to unscrew the lid to get at the jumpers.

**PROS** If you want traditional paddle control with a DAW this is the way to get it; neat, compact and good looking.

**CONS** Limited number of display characters means cryptic track and stem names, although these are expanded when selected; not much else.

### Contact

**CB ELECTRONICS, UK:**  
Website: [www.cbelectronics.co.uk](http://www.cbelectronics.co.uk)