

Z-Systems Optipatch

Regarded by some as the route of all evil, signal distribution can be complicated and expensive in the analogue domain and expensive in digital. Now here's an affordable digital solution. **ROB JAMES** tells us that he doesn't like patchbays.

THE MATRIX, DESPITE the sinister connotations of the eponymous movie, is a good thing. The patchbay, jack field, or whatever you wish to call it, is not. This might be considered a contentious statement. However, more studio downtime results from patching problems than any other single cause, at least in my experience, and if you add up the time spent repatching with individual cables the argument is even more persuasive.

Whether the patch is phono plugs, A or B gauge 1/4-inch jacks, bantams, XLRs or D-Sub connectors, frequent patching means only one thing, a source of trouble. Optical connectors are no better in this respect. A few specks of dust are sufficient to introduce intermittent problems of the 'extremely annoying and difficult to trace' variety and the optical 'cables' can be fragile.

So digital optical patchfields are just as risky a proposition as their analogue cousins. This is a pity since the TOSlink optical connection in both ADAT and



SPDIF flavours is otherwise cost-effective and convenient. Sixteen slim and cheap optical fibres or 16 eight-pair copper multiways, which would you choose? TOSlink connections have been gaining in popularity, probably due to these factors. Apart from the reliability aspects there is also convenience to consider. I for one am fed up with crawling around the back of the racks with a torch (*Normally in your teeth, remember: Ed*) repatching optical lines. Enter the matrix.

Routing matrices have been with us for a long time. In the video world small and extremely large-scale matrices have been a common feature for decades, routing video and audio signals at the touch of a

button. More recently, audio-only routing matrices have become more popular as prices have fallen. Z-sys is renowned for the engineering of its de-tangling matrix solutions and its processors but has never been considered a doyen of the bargain basement. The Optipatch changes this impression with a retail of under UK £400 (+VAT) for the 8 by 8 version. (Given that the ADAT format carries 8 channels of 48kHz per connection this translates to a 64 by 64 matrix).

The catch, of course since this is a simple matrix, is that you can only route in blocks of 8 but this still represents a lot of patching for not a lot of money. If the 15 by 15 Optipatch+ model seems disproportionately more expensive, consider the increase in the number of cross-points, 225 as opposed to 64.

Downsides, well, for one thing, there are no remote control possibilities. In many circumstances this will be of no consequence and may even be an advantage.

Although I am not a lover of external power supplies I can understand that they help keep cost down as it has done here. The only other thing to watch out for is pretty big splats when the crosspoints are actually made. Although good practice dictates no source should be faded up when it is being patched, real life is often a little different.

Optipatch has been working quietly and unobtrusively in my studio for the last month or so and I haven't needed to grovel in the dust behind the racks. I can repatch the entire studio with a couple of key presses. It also appears to be completely transparent in audio terms.

If you are convinced by the virtues of simple optical interconnects but are becoming bored by the chore of constant repatching, here is a simple, cost effective solution that will tidy up the rat's nest and just work. ■

Operation

Optipatch is shallow (153mm) and, unlike copper, the weight of optical cables does not present any mounting problems. The rear panel has 8 TOSlink ins and 8 TOSlink out sockets plus a 9V power jack. The Optipatch+ increases the number of optical ins and outs to 15 of each and uses a slightly different method of routing.

The front panel has two knobs to select the inputs and outputs with an eight-character numeric LED display between them and four keys. Optipatch displays the number of each source above its corresponding destination. A single source can be connected to multiple destinations so Optipatch can also function as a distribution amplifier. Even better, Optipatch supports multiple sample rates. So one crosspoint can be at 44.1kHz and another at 48kHz without any problems.

Equally, and providing the source and destination types are the same, SPDIF and ADAT connections can be freely mixed. Patching is simple.

The left-hand knob determines which destination is being routed to, indicated by the relevant column in the display flashing. The right-hand knob sets the source. Routings can be made in any order. When the set-up is finished, pressing the Route key transfers the indicated settings to the crosspoints. If the Display is flashing, the assignment has not yet been made.

Routings can be saved to any of 99 locations, selected via the Save key and the left-hand knob. Recall of previously saved routings is accomplished in a similar manner, using the Recall key to recall a patch to the display, then hitting the Route key to actually make the routing. Made a mistake? Use the Cancel key.

Optipatch+ works in a slightly different way. The display is the same size as the Optipatch so all 15 destinations cannot be shown simultaneously. Instead the Source and Destination numbers are shown individually. I didn't have an Optipatch+ for review but this way of operating seems, if anything, even more logical than the Optipatch.

PROS	Simplicity; low cost; transparency.
CONS	Wall wart PSU; no remote control; could be prettier.
EXTRAS	Z-Systems' z-K6 is an 'up-mixing' mastering-grade processor that takes a stereo signal and evolves it into 5.1 using a combination of EQ, ambience and 'focus' processing (<i>Resolution V2.1</i>).

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