Digidesign Icon

Playing its role in the great return of the control surface, Digidesign's Icon is seen by many as more of a statement of intent than just another interface. JON THORNTON crawls all over the Pro Tools flagship.

THE ARGUMENT WILL be familiar to anybody who has used Digidesign's or other manufacturer's control surfaces with Pro Tools: while you can't dispute that having faders available to control level and mix is a significant improvement, some of the other functionality of these devices is limited at best. The end result is that you still find yourself spending an awful lot of time interacting with the Pro Tools GUI, while getting the sneaking feeling that you've spent a lot of cash on what is effectively a very fancy mouse. And even with current US exchange rates meaning that Icon pricing is dropping (in our favour), a UK£40k basic price tag is a lot of cash for a pointing device.

Icon itself is best described as a number of different elements working together. At the heart (and there's no getting away from it) is a Pro Tools HD system, configured with as much DSP power and I-O capability as required. The minimum control surface configuration is the D-Control, which consists of a master section that houses a keyboard, tracker ball and a host of other controls, and 16 channel strips. A heavy-duty monitor arm can be attached to the master section, and additional channel strips can be added to this in blocks of 16 channels. The final piece of the jigsaw is a 19-inch rackmount box called X-MON, which is addressed by the control surface and provides additional audio I-Os for monitoring and studio ancillary purposes (see sidebar).

First impressions are that Digidesign has clearly put a lot of effort into the industrial design and ergonomics of Icon. Compared with the slightly flimsy look and feel of ProControl, this looks and feels like it is built to last. Faders are P&G throughout, and the distinctive touch sensitive 'mushroom' knobs for the rotary encoders feel positive in action and allow a good view of the surrounding LED ring while in use.

Each of the basic channel strips has a fader with associated status LEDs, and a set of dedicated controls for mute, solo, input monitor mode, record enable, automation modes and channel select. Above these are six rotary encoders, each with four status LEDs and two function switches. A further bank of illuminated buttons effectively determines what these encoders are doing and showing, from a basic menu of inserts (plug-ins), to sends, pan, or mic preamp settings if you have Digidesign's remotely controllable mic preamp box configured in your system. Every encoder and fader is accompanied by a six-character electronic scribble strip.

So far, this is pretty standard control surface fare and ProControl users, for example, will have no difficulty in mapping the conventions for selection and editing parameters. This is unsurprising, as the core technology in Icon is a development of the Ethernet control protocol used in ProControl — the changes come from increases in the number of dedicated controls on each channel strip. This can be fairly daunting at first, as you are learning to look for things like post/pre or automation status indicators on the control surface itself rather than on the GUI, but this learning curve is no different to any other digital console in that respect.

Where things take a radical turn for the better is in the integration of the master section with the individual channel strips. Flanking either side of the master section are two identical master channel strips. Both operate identically and mimic the other — ostensibly allowing for ease of control whatever the mix position — although I can't really see the logic in this as they are only a couple of feet apart. The function of this master strip is two-fold. At one

level, there are sets of global controls for the console that allow operations, such as input and output assignment, to be implemented across all channel strips. For example, pressing Input Assign brings up available inputs to each channel on the bottom row of encoders — inputs are selected with the encoder and pressing Input Assign again confirms all assignments. The same process can be used for assigning inserts, outputs and sends for each channel.

A further group of switches allows the selection of global modes for all currently visible channels on the control surface (remembering that the control surface can page through more channels than there are physical channel strips). This allows you to see send levels, inserts, or pan information across all channels of the control surface very easily. There are also controls here for EQ and dynamics, and pressing these repeatedly will toggle through the assigned plug-ins of these types, bringing up the parameters on the rotary encoders for each channel.

Other global controls allow you to change globally the type of information displayed on the scribble strips, or to change the function of one of the switches on each encoder between a mute or a pre/post selector. You can also globally make inputs, outputs, sends or plug-ins active or inactive by pressing the appropriate global switch, and then selecting the channels you wish to perform this action on. Finally, a 'Do to all' or 'Do to selected' switch allows you to apply a change made to one channel to all channels or just to selected ones. This makes tasks such as instantiating a common EQ plug-in to all channels, or setting up a common send for foldback for all channels, very quick and easy.

This, however, doesn't explain the existence of a fader on the master channel strips and although analogue console die-hards might expect it to be, this isn't a master fader. Instead, it works in conjunction with a small, but powerful switch that changes the Select switch on each channel strip to become a Focus switch. If this mode is enabled, selecting a channel will focus it to the master section, and the fader will then control its level. In addition, by focussing a channel, any EQ or dynamics plug-ins assigned to that channel will appear on the dedicated EQ and dynamics panels of the master section.

These panels provide dedicated rotary encoders and switches for the most common parameters in EQ and dynamics plug-ins. They are dedicated in the sense that the legending isn't via an electronic scribble strip, but is actually printed next to each control and arranged in a familiar and obvious layout. The EQ section can accommodate up to five bands of EQ with dedicated frequency, gain and Q parameters plus a high and low pass filter. In/Out switching for each band, plus shelf/peak select buttons, input and output gain and metering are also provided. Two scribble strips confirm the plug-in name and the channel that it is focussed on.

The dynamics panel is similar, offering standard parameters for compression, some of which have a dual function depending on whether compression or expansion/gating is the order of the day. Both panels have extensive controls for selecting and/or linking channels of multi-mono plug-ins. It's clearly a difficult job — as there will always be plug-ins that either do not use all the parameters available or that have more parameters than are available via the dedicated encoders — but what is offered seems to be a very good compromise. It also depends on plug-in developers mapping their parameters properly to the conventions of the panels — although Digidesign reckons that 90%

of current plug-ins are fully compliant.

While the inclusion of these panels represents more of a shift towards a 'conventional' digital console (and certainly makes operation more akin to one) this is by no means the Icon's best trick. The award for that has to go to a function called Custom Faders. Custom Faders superimposes a block of channels (by default a bank of 8 although this can be expanded) on to a user-defined position on the control surface.

At its most basic level this can be used to create customised clusters of existing tracks that appear in a specific order, but there are a number of other modes. For example, you can use the custom fader area to bring up any existing mix or edit groups in Pro Tools, so that all channels belonging to a group will appear in one place on the control surface. Or you can show all of the master faders in a session in the custom faders area. The custom faders area can also work in plug-in mode, which will bring up the parameters of a plug-in on the currently focussed channel on all of the encoders in the custom faders area.

With a bank of eight custom faders, this puts 48 encoders at your disposal for plug-ins, any of which can be flipped down to the faders for fine control. With a little planning, this also means that you can create a 'super-channel' on a custom faders bank — for instance you could have the first fader as vocal level, the next as the reverb send on that vocal, the next as the threshold control for a compression plug-in, and so on. Specific custom fader banks can also be stored and recalled using the Bank Select buttons on the master section and although this is a feature unique to Icon, all of the information about custom fader groups and plug-in mapping is saved with your Pro Tools session.

Elsewhere in the master section are the usual window-management buttons and cursor/navigation keys that will be familiar to most ProControl users as quick shortcuts to bring up various windows on the standard Pro Tools GUI. What is new is the soft keys section. This not only allows the configuration of some preferences and settings that are unique to Icon, but also allow many functions that could only previously be accessed by the GUI to be performed from the control surface. This includes creating tracks, managing audio files, creating and editing groups and playlists, together with all of the basic editing functions of Pro Tools. While I suspect that most users will still prefer to edit directly at the GUI, the provision of these functions with some direct feedback via alphanumeric displays does save a lot of switching between looking at the console and looking at the GUI when performing these more basic tasks.

It's worthwhile looking at metering at this stage, as this is also historically one of the issues that draws your attention back to the computer screen. On Icon it is a quantum leap forward. Each channel has two 32-segment LED bargraphs. These can show signal level (in stereo if the channel is a stereo source, the hottest signal in the case of a multichannel source). In custom fader mode, these bargraphs can also show input and output level, gain reduction and other plug-in parameters. Because the LEDs used are all tri-colour this multipurposing works very well — if a meter is showing gain reduction, for instance, all segments will be amber. The LED rings surrounding the encoders can also be used as indications of send level or plug-in metering if required, although it has to be said this is more useful in providing an overall impression of what is happening rather than accurate metering.

Overall Icon is an intriguing beast. I have to say

X-MON

X-MON works in conjunction with the monitor section on the Icon to provide audio level interfacing in a studio environment. All audio actually travels to and from the XMON box itself. The only exception is the signal from the desk's internal talkback microphone, which is carried to X-MON along a single cable together with control data.

Audio inputs to X-MON comprise a main input (8 channels), an additional surround input (8 channels), four stereo inputs and three stereo cue inputs. In addition there are two inputs for listen-back mics, and an input for an external talkback mic. In most circumstances, these inputs would be fed from Pro Tools interfaces with the exception of the stereo inputs that could come from stereo playback devices. Audio outputs from X-MON are pretty much the same in reverse, 8 main outputs, 8 alternate outputs and a stereo output for mini-monitors. Three sets of stereo cue outputs and a slate output completes the picture.

The monitor section on Icon basically provides the matrixing and level control information to the X-MON, which allows monitoring different sources in environments up to 7.1 surround in addition to handling the usual things like dimming on talkback and generating headphone cues (although these would have to be generated as a physical send from Pro Tools into X-MON — the cue level is simply a master volume control). There are some neat instances of integration here. For example, the auto-talkback function engages talkback whenever the Pro Tools transport is in stop, and disengages it in play or record *(Sounds familiar. Ed)*

It is also possible to trim the monitor output levels remotely from Icon to do some basic system calibration, and multiple surround sources can be monitored simultaneously. When working in a multichannel set-up, individual channels can also be muted on or off. Clearly, there's been a lot of thought given towards working in a multichannel environment so I'm surprised that they didn't go the whole hog and build bass management in.

that I was much more impressed than I expected to be, and you certainly can't level the accusation at it of being just an expensive mouse. If you are mixing music or working in post, this is a tremendously functional control surface that almost lets you forget that you are effectively just working in Pro Tools. Almost but not quite, there are still some things that keep reminding you. For example, having to configure your I-O setup via the GUI.

I guess that Digidesign could have focussed us away from the GUI even more if it had wished but that would be really ignoring the fact that Pro Tools is more than simply a DSP engine for a digital mixer. For music tracking I'm still unsure whether the ergonomic is exactly right — I still feel the need to know that channel 6 gain is always where I expect it in these instances — but this could simply be a matter of familiarity. And I'm not sure whether Icon would ever become a reason in itself to move over to Pro Tools. But if Pro Tools is already your platform of choice, Icon is an extremely compelling product. ■

PROS Good ergonomics and industrial design; custom faders are fantastic; X-MON gives very flexible monitoring options; deep down it's still Pro Tools.

CONS Fairly steep initial learning curve, even for experienced ProControl users; not entirely convinced that it is immediate enough for a primary tracking desk; deep down it's still Pro Tools.

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