WK-Audio ID Controller

The first decade of the new millennium has marked the return of the hardware interface and that's after ten years when we were told that we could and should do it all with a mouse. DAW control is crucial for modern productivity. ROB JAMES looks at a controller for Steinberg Nuendo.

BEFORE CONSIDERING THE merits or otherwise of this device I feel the need to re-examine what we are actually talking about. Nuendo is a DAW, so, what is a DAW when you break it down into its constituent parts? The basic identifying features are the same no matter how they are presented to the user or even if the individual parts come from different manufacturers.

They all contain the same basic component groups: processing, storage and control. Assuming reasonable design competence, technology has progressed to the point where the processing and storage can almost be taken as read. The user interface(s) present the real challenge. In a mere 15 years or so the WIMP (Windows icons menu pointing device) GUI has become ubiquitous. This interface has developed to the point where talented individuals are able to routinely undertake complex tasks that were previously the province of teams of skilled workers.

The sheer breadth of functionality in current workstation packages is difficult to grasp and maybe even more difficult to control through the tiny keyhole of mouse, keyboard and screen. Understandably, in an attempt to ameliorate the tyranny of the WIMP, many aspects of the GUI have been made user configurable, in particular, keyboard shortcuts. However, some form of dedicated hardware controller with familiar faders, knobs and buttons is now considered essential to DAW success. At the high end, control consists of a more or less traditional-looking hardware mixing surface with a row, or rows, of faders, knobs and buttons and a dedicated editing worksurface which, depending on the application and user preference, may or may not include a display screen.

It is increasingly likely there will also be a personal computer for housekeeping duties and often handling the automation as well. At the low end, controls will most likely be a mouse and/or ASCII keyboard shortcuts with a screen representation of a fairly conventional mixer plus a timeline track display for editing. The middle ground is the most fertile area for innovation, where cost is of slightly less concern than the bargain basement and where taking the occasional creative risk is still (just about) affordable.

Any user interface, hardware or software, imposes a set of constrictions on the operator. This is a good thing providing the interface is well designed. Constriction means discipline and, in turn, discipline should ensure the interface will be consistent. But there is also the issue of choice.

Politicians and marketing departments have attempted to make 'choice' a must-have commodity. Far too often this choice turns out to be mere piecrust concealing a lack of truly useful options. Just as in a restaurant, there is no point in having a menu as long as your arm, if there is nothing on the list that you actually want. Long menus also breed the suspicion that quality cannot conceivably be as high as a restaurant/workstation concentrating on a few well-chosen dishes/functions. In short, choice is often a cop-out revealing a lack of conviction and discipline. Do you really want to choose which pedal works the accelerator and which the brake?

In the past, I have bemoaned the absence of radical thinking in physical control surface design, but I think I'm beginning to understand. If a development is truly an advance it sticks and becomes the norm. The humble fader neatly illustrates the point. Rotary knobs were fine for level control when a 'big' console had maybe ten inputs, but soon became unwieldy and uninformative as channel counts rose. Faders not only offer a high degree of control but also excellent visual feedback. But no one would seriously suggest mixing using rotaries today. Or would they?

Steinberg's Nuendo workstation has been gaining ground in several fields. This is in no small part due to the company taking serious note of all the many issues arising in real-world workflows. Until now, Steinberg has only offered the compact Huston hardware control surface. The only alternative has been to map functions to a third party controller or digital console. It is fair to say that any DAW wanting to be taken seriously in the middle to upper echelons of today's market needs a scaleable, dedicated controller. WK-Audio has closely co-operated with Steinberg to produce the ID VST controller, initially for Nuendo. At an asking price of just under UK£10,000 for the basic unit, it would seem reasonable to expect something pretty spectacular.

First impressions certainly do nothing to dispel this idea. The ID has the look and feel of a high-end bespoke console. Heavy metal framework, real cow on the armrests, sensible fader pitch and lots and lots of

industrial strength internally illuminated buttons and alphanumeric displays all help reinforce the image. This so-called basic version consists of two sections, a Fader Module joined to a Master Module. The Fader Module is a block of 12 touch-sensitive motorised faders, 39 encoders, which are also push switches, no less than 52 two line back-lit alphanumeric displays, all supported by numerous buttons, position indicators, and 24 bargraphs in the meter bridge.

The Master Module has 8 bargraphs in the bridge, a Monitor section, the Edit and Transport section and the all-important General Functions strip. The square buttons are extremely positive and click when pressed. The legends show up well and it is a simple matter to laser print your own inserts for the user programmable ones. The internally illuminated round Function buttons are similarly positive but feel less pleasant to operate.

Up to four additional Fader Modules can be added for a total of 60 faders and there is an optional metal stand. A joystick module can be slotted in and various custom options are possible such as, 'modification of electronic components, hardware and design, e.g. built in analogue preamps, different front covers, alternative LED colours, different leather for the arm rest, Meter Bridge removal, wooden side panels, etc'. This level of detail customisation reflects the bespoke character of the ID and also the fact that it is manufactured in Germany rather than the Far East.

Connection to the computer is via USB. A pair of mono balanced jacks on the rear panel allows an appropriate analogue source to be connected, this will then reappear on the front stereo headphone sockets, mounted on the right, under the armrest.

Software installation is in two stages, a Firmware loader and the Driver itself. As usual the driver is not Microsoft certified, so just ignore the warning messages. Before the ID can communicate with Nuendo it has to be set up in the Device Setup menu. This is also where the 24 User buttons can be assigned to Nuendo functions. User buttons are located where the user is most likely to require functions specific to a particular application — such as a block of six above the trackerball, one with the transport controls, a further block of ten adjacent to the ASCII keyboard (which might well be assigned to the same functions as the function keys in Nuendo), and so on.

The ID embodies a number of key operational concepts. Push Hold Detection — pressing a fixed function button for anything longer than 250mS activates the corresponding function only for as long as the button is held down. A momentary press activates or cancels the function — for example, Solo. The Expand function key, found on the fader strips, places all incoming elements of the strip on adjacent strips for editing.

Pressing Expand on a group channel puts the group master on the leftmost fader followed by all the channels feeding the group. Reverse Operation explains the rather unusual ASCII keyboard layout — serried ranks rather than the familiar stagger. In this mode the ASCII keyboard becomes a matrix of On/Off switches with status LEDs for the last selected function type. So, if the last thing you did was mute a channel, when you enter Reverse mode the switch matrix controls muting of channels 1-48 or, by pressing the appropriate button, channels 49-96. Once in Reverse mode, any switch function you operate in the fader section becomes the last selected function and the keyboard status LEDs change to reflect the current status for this parameter. Once understood, this is potentially an extremely powerful tool. By pressing Goto Mark the same keys can also be used to give 96 direct locates.

As you might expect, the Faders control tracks and channels. Because of the clever Nuendo bus architecture this means a single fader controls anything from a mono source to a 10 channel wide source. Bank Select buttons decide which source(s) are displayed and controlled from the following selection: User does nothing at present, Inputs Only, Buses only, Audio playback channels only, MIDI only, Groups only, FX Returns only, Instruments only and FGR, which shows all tracks/channels and channel classes arranged as they are in the Nuendo Mixer windows.

The strip Ready doubles as Record and Automation arming. This can be confusing since it is possible to arm both at once if you don't work methodically.

My first real problem with the ID arises here. The encoders above the faders are not, as you might expect, either dedicated pans or programmable, but are actually fader level for another channel strip in a kind of in-line sense. FDR and ENC buttons select the tracks in Nuendo and Flip swaps the two tracks between fader and encoder. The tracks to be controlled by the fader and encoder are determined by the track order in Nuendo. So, with Audio selected on the Bank Select buttons, if you have, say, 24 tracks, then 1-12 will be on the faders and 13-24 on the encoders, unless strips are flipped. This isn't too much of a problem with a comparatively simple set-up but can become horribly confusing with larger and more complex post projects.

When there are more than 24 strips involved, the hidden ones can be moved onto the surface 24 at a time with the Bank Up and Down buttons or one at a time with the Chan Up and Down buttons. There is no way to hold a channel or channels on the surface while moving the rest.

The Channel Strip section in the shallow angled area above the faders has two rows of encoders and displays and can be assigned in a wide variety of ways to a wide variety of purposes. Panning, Aux Sends, EQ, Plug-ins and VST Instruments.

In the Edit Section the trackerball and associated black buttons are simply what they seem, an alternative to the computer's mouse. Above these is a block of six user buttons.

To the left, the jog wheel has a great feel, smooth and well weighted, but curiously Nuendo doesn't yet allow you to use this for jog and shuttle, only for positioning, zooming and editing functions in conjunction with the six buttons around it. Zoom Time, Zoom Tracks, Range, Nudge Event Start, Move Event and Nudge Event End. Immediately above is the main timecode display giving the current cursor position in whatever units are currently selected in Nuendo.

The left Transport control block has the usual buttons but no reverse play. Above the transport buttons two further blocks of buttons are used for Transport and Marker settings. The two line displays show the current left and right locator positions and pre and post roll settings.

The ASCII keyboard has several functions as discussed above. The keys above give direct access to many Nuendo functions. In the first block Mixer and Pool open the respective windows and Layout 1-6 give direct access to different window layouts. The next block accesses Grid and Edit Functions. Snap Mode cycles through all the available Snap modes. Grid Size does the same for Grid size values. The other keys either toggle functions such as Autoscroll, Snap To Grid, etc, or simply remote control functions such as Paste, Undo, Redo, etc.

The Edit Function block contains buttons for commonly used edit functions such as Cross Fade,

Lock Event, Mute Event, etc. The last block of four buttons is global. If Global Access is active a single operation will apply to all tracks/ mixer channels. At present the list of functions is restricted to EQ and Sends slots switching. The Reverse button is here as are the channel 1-48 and 49-96 buttons.

There are several methods of selecting tracks, the FDR and ENC buttons above the faders, the cursor up and down keys on the ASCII keyboard or in Reverse mode by directly pressing the required track number key.

The Monitor Section is the least developed area. Solo In Place is currently permanently active. Solo Reset resets all solo settings except Solo Save. PFL/AFL, Solo ALT, and the surround solo buttons don't yet do anything.

VU to Mix shows the level of the first output bus, VU to Chan shows the level of the selected channel(s) on the master section meters. Solo Dim, Talkback, User Settings 1 & 2, the Talk button, Speaker Out Controls and External Return do not currently do anything.

In the Control Room, Phones and Studio controls area currently only the Level pots (and they are pots) do anything. Because these are pots rather than continuous encoders, moving them can result in extreme level changes...

There is always a wish list. With a subject as personal as control surfaces the list is inevitably a long one and will differ markedly, depending on the user's previous experience and preferences. For example, Nuendo has jog and shuttle in its transport control repertoire so why hasn't this been implemented for the excellent jog wheel on the ID? The absence of a Jog/Shuttle button seems odd too. However, the ID has the potential for considerable future expansion and customisation. High grade, back lit switches with easily replaceable labels will help the process. Just because a button says 'Range' now doesn't mean it can't say Jog/Shuttle if the feature is implemented.

There are a number of other things with the current control mappings that give me problems. This is a purely personal view but, if enough people felt the same way, I am sure the controls could be re-mapped and in any case, many of my issues are fixable in Nuendo rather than the ID. Hardware issues are more serious because they cannot easily be fixed. I really would like to have seen a dedicated Reverse Play button and either dual concentric encoders or just more rows of them. Proper encoder touch-sense would have been nice as well. Some of these points will be answered by the imminent release of Nuendo 3. Some are effectively cast in stone by the hardware configuration. That said, this is a very comprehensive and massively configurable worksurface with huge potential for the future. It all depends on software developments. ■

PROS	Plenty of room for future developments; solid, professional feel; will undoubtedly increase productivity.
CONS	Price a little high; odd use of rotaries above faders; a significant number of controls are inactive pending Nuendo update.

Contact