

Yamaha DM1000

Yamaha chose to open its O series digital desk replacement campaign with the upmarket flagship DM2000, following this with the 02R96 and 01V96. It is possible that it saved the most interesting sibling until last, according to **ROB JAMES**



THE DM1000 CAN BE superficially thought of as a replacement for the 03D, always my favourite of the original 'O' family. (So much so, I bought one and don't think for one moment that it was at a silly discount...) Until recently this has demonstrated exemplary reliability, but just lately it has blotted its copybook. Partly because of this, but also because time has moved on with higher expectations and sample rates, I am in the market for a new console. As with 02R96 the DM1000 owes more to the DM2000 than to the previous consoles. However, there are some similarities that ensure it will appeal to the same people as the 03D. At a basic price of around UK£4100 (+VAT) including the meter bridge, it offers a great deal more console for around the same cost.

The DM1000 is narrow enough to allow installation in a 19-inch rack. It is deeper – both front to back and top to bottom – than the 03D. This is partly due to the 100mm touch-sensitive faders. More to the point, the DM1000 seems generally more focussed and targeted on the professional end of this market segment. It is

also ideally suited to fitting in custom furniture. The space between the front of the console and the faders is small allowing a custom wood or leather armrest to be easily accommodated.

Another clue to where it is aimed is the in-built socketry. The entire analogue I-O is on XLRs. Not a token jack or phono in sight and there are no pre-A-DC dedicated analogue inserts. I am slightly surprised Yamaha did not use the popular 'combi' jack/XLRs for the inputs but I really don't miss the inserts.

The DM1000 follows the layered fader with assignable control paradigm. Horizontal or vertical pairing is available and M&S decoding should please the broadcast folk. Four layers are necessary to access physical input channels 1-48 and the masters. The other two layers are for remote control. These can be used to good effect with an external DAW but can be used with any suitable MIDI device. Templates are included for Nuendo and Pro Tools with more in development. The patient and confident can make their own.

A User Assignable Layer function allows specified input faders and bus/aux master faders to be assigned to a single

layer to keep specific inputs and outputs on the surface together. There's also grouping of fader and effect parameters. Metering on the surface is a stereo LED meter adjacent to the screen. The meter bridge is well thought out with 24 bargraphs in total, 8 of which are always looking at the bus outputs with the remainder switched between the various fader layers, either following the fader layer selection or independently selected from buttons on the bridge. There is also a big, bright time code display.

DM1000 offers the same choice of two EQ algorithms found on the DM2000 and 02R96. Type I is the original O series algorithm. Type II is less clinical and arguably more musical. I am still hoping Yamaha will come up with more exciting variants in future software versions.

Dynamics and metering can be pre EQ or pre or post fader, a vast improvement over earlier O series arrangements.

All four of the on-board effects 'units' are full 24-bit, 96kHz. The first of these can be used for surround

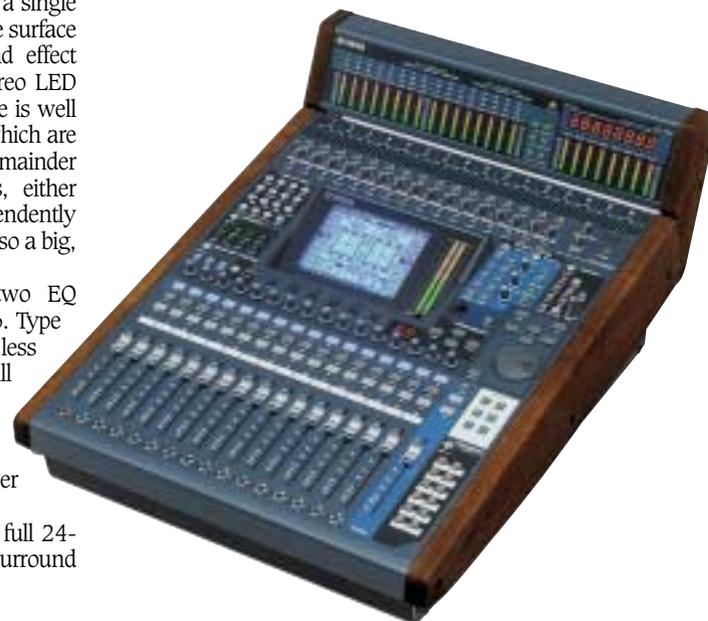
effects including reverb and multichannel dynamics. As ever, lunch is not free and a single 5.1 reverb uses all four processors. Yamaha provides the most complete surround implementation to be found at this level with 3.1, 5.1 and 6.1 surround modes covering the most popular formats in common use. Bass management, downmixing, level trim and delay functions are all included.

Control surface real estate is understandably at a premium so this is screen controlled although the User Defined Keys can be used to good effect for muting. These keys have 8 banks of assignments and will be useful for machine control, dynamic automation, Scene Memory control and so on.

Without the supplied Studio Manager software this console could well be just too complex for its own good. The sheer number of possible mug-traps is daunting. With Studio Manager it becomes much more 'manageable'. Automation and set-up data can be saved or loaded to and from the PC or Mac. The software also keeps track of what is going on via graphic representations of channel strips, effects and the surround panner.

Complete set-ups can be undertaken off-line and uploaded to the console in seconds, complete with libraries and automation. However, Studio Manager still has plenty of scope for further development. I would like a page that allows parameters from more than one layer to be viewed at a time, for example fader positions, and it would be nice if controls snapped to their default values when double-clicked.

Learning any new console is partly a matter of teaching 'muscle memory' where everything is. Trouble is, once learnt this can catch you out when moving between superficially similar boards. Initially, I found myself instinctively hitting the Scene Memory Store and Recall keys when I actually wanted the left and right cursors. When, and if, the DM1000 returns



to Yamaha I have no doubt I'll have the same problem in reverse.

At first glance the surround pan joystick seems tiny and in use it is difficult to position accurately. This could be considerably improved by simply extending the length of the stick. I would like to have seen greater headroom 'inside' the console and two more bands of EQ, specifically for HP and LP filters, but apart from these gripes I feel very much at home with the DM1000.

It is ideally suited to applications where space is constricted and where the task(s) may be complex but there is no need for instant access to every possible parameter. With careful thought it is possible to arrange things so that the controls you really need are always to hand. The user assignable layer is particularly welcome. The DM1000 has the 9-pin machine control lacking on the 02R96 and the same number of effects processors and there is considerable synergy with current generation DAWs. A number of features help make the console eminently suitable for live use and operation by several operators. For



The analogue I-O section has 16 XLRs doing double duty for mic and line level inputs plus four further XLRs for omni inputs. Each of the 16 mic/line inputs has individually switched 48V phantom powering, 20dB pads and input gain rotaries on the console surface. There are 12 XLR analogue Omni Outputs. Digital I-O is limited to a pair of 2-track inputs and outputs, one XLR AES-EBU and one phono SPDIF. Inputs have sample rate convertors and outputs can be dithered.

Two slots accept optional mini YGDAL interface cards. Given the 48 input channels, direct outs, inserts, etc. two slots might seem a limitation. However, Yamaha has introduced new ADAT, TDIF and AES-EBU YGDAL cards handling 16 channels per card at 44.1/48kHz sampling rates and this completely changes the picture. Alternatively, each of these cards can be used in double channel mode to provide 8 channels of 96kHz I-O. Comprehensive patching makes the whole I-O massively flexible.

The remainder of the socketry is concerned with control. A 25-pin D-sub deals with GPIOs, a 15-pin D-sub is for the meter bridge, and a 9-pin D-sub caters for Yamaha AD824, Sony P2 protocol remote or serial linking of two consoles. Word clock I-O are on BNCs, MIDI on DINs, along with a USB 'To Host' connector and an XLR for SMPTE In.

The control surface follows the conventions established by the DM2000. Light grey diamond keys are all concerned with display access. Controls are gathered together in logical groups. Channel rotary encoders are globally switched to control pan, aux, or to make assignments and the faders can control input or aux send levels. The rotaries are also push switches used to pop-up windows, confirm selections and to drop functions in and out of automation write. The 4-band equaliser has three encoders, a Display key and four Band keys. Pressing the highest and lowest together restores the default values.

example, an Operation Lock allows groups of functions to be made safe from operator changes and can be password protected.

48 channels will be more than sufficient for many purposes. It sounds just as good as its siblings and significantly better than the previous generation. Unlike the DM2000 and 02R96 there is no cooling fan.

In many ways, the DM1000 represents the 'state of the art' in affordable, assignable, digital control surfaces with built-in DSP and I-O – not forgetting its talents as a DAW remote controller. However, now we are growing accustomed to this way of working it is becoming apparent much, much more could be achieved. I confidently expect Yamaha to build on this foundation and surprise us all as they once did with the 02R.

If the other members of the family have been

whetting your appetite, but physical size and or cost have ruled them out, the DM1000 may be just what you need. ■

PROS Compact powerhouse; sounds better than previous '0' series; DAW remote control.

CONS Analogue I-O a bit stingy; only 4-band EQ; complexity.

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