

Klark Teknik Square One Dynamics

Representing something of a departure for the manufacturer in presentation and format, KT would target this unit at its traditional live sound market, yet it has obvious applications to the studio environment. **ZENON SCHOEPE** looks at an 8-channel box with many flavours of compression and gating.



PRESENTED IN A TASTY shade of purple and offering eight channels of dynamics processing in a 3U, the Square One Dynamics is a fine looking unit, if a little busy. Eight channels of dynamics means eight channels that can each be employed either as a gate/expander or as a compressor. This is an interesting twist on the traditional format of a compressor with a gate thrown in for good measure. The Square One asks you to decide what you want to do on a single button marked Gate. Channels default to compressor but this switch flips to gating.

At this point the attentive will have spotted that the controls are shared between the two functions. This could make things tricky but providing you clock the status of the Gate button's LED you won't come unstuck.

You get pots for Threshold, Attack and Release shared between the two processes but the Gate adds a dedicated Hold pot and the Compressor gets a Gain Makeup control. Both share a pot that does Ratio in the compressor and Range in the gate. Other shared commodities include input LED metering and a 10-segment gain reduction/attenuation meter. Now, I was convinced that the latter meter would read nonsense in either or both conditions but by a stroke of genius it makes perfect sense in both cases. Similarly with the Ratio/Range pot.

The only complexity occurs if you have chosen to mix gates and compressors randomly across the eight channels because you might grab a pot thinking it was something else. More structured planning and patching reduces the risk of this but there's plenty of room to scribble an identifier below each channel.

The type of compression you're playing with is dictated by the position of two buttons marked Vintage and Hard Knee. Predictably, with both buttons out the default response is soft knee and RMS sensing. While you can guess what the Hard Knee switch does, you'll need to be told that the Vintage switch activates a peak sensing characteristic. Combining this with the

Hard/Soft Knee switch position changes the Vintage character and you could regard the compressor section as effectively offering four types, or rather characters, of gain reduction all with varying degrees of adaptive and manual control intervention.

That's a more sophisticated circuit than I was expecting in such a compact channel but the options are there and certainly boost flexibility. My own favourite was Vintage/Soft Knee driven with gusto. A good sounding compressor – way too good for live!

A sidechain section allows you to tune in for the gate and expander triggering by activating the Filter switch with Narrow or Wide band width. As far as the Gating goes it does what you'd expect and I find it hard to get too excited about the presence of i-TS (intelligent threshold shift), which apparently reduces chattering. It works fine. Tuneability is not in Drawmer league but then that is not always required.

You can also apply the same sidechain process to compression for de-essing or just for mucking around with what the circuit is looking at. This adds enormous potential to what can be attempted with this box. Rather than being a skimmed down quick and easy sort of affair, which it can undoubtedly do very well, you can truly problem solve and enhance with the Square One. If it's a bad signal you can sort it out and if it's a good signal you can make it even better.

An External Key input switch causes the channel to look to the rear panel 1/4-inch socket above each channel's XLR I-Os. Really smart is a Solo switch that allows you to monitor the selected channel's sidechain through a dedicated rear panel solo output XLR.

Adjoining channels can be linked for stereo with the left hand channel taking control of all parameters apart from Make up gain and sidechain filter. It's interesting to note that it's possible to link any number of channels providing they are adjoining so a multichannel compressor is achievable. However, the refinement in prioritising channel threshold response and of interlinking within the whole group of channels

is lacking so this box would only serve as the most elemental of processors in this capacity.

Build quality is good but there's a tiny bit too much shaft flex for my liking. While I love the colour of the panel, the legending is for me a little faint in half light. It's a matter that is compounded by the vertical layout, which I otherwise love. Horizontal orientation always gives more clearly defined space to control sections. Flip it upright and you have to compact the controls – unless of course you want to create a 6U 16-channel dynamics box. When you can't see clearly and if you're in a hurry the arrangement and legending can frustrate. The answer is to light the front panel well and to get it up to around eye level so you're not looking down at it with the controls obscuring each other. That's particularly important if you have a mix of processing types arranged on the channels as mentioned earlier. Fractionally smaller pot diameters and variety of pot heights might have improved this. If the box was mine I'd probably also magic marker the tops of the non-LED switches so I could see more clearly if they were in or out.

Allowing for that, you can't really knock the Square One on performance: it's quiet, clean and the compression is sophisticated and flexible. What makes operation pleasing is that KT has got the 'pot turn' to 'audible result' ratio absolutely right – you don't have to twiddle half a turn to get things happening as there is control available at all stages of the pots' travel. It's a crucial quality in outboard and I've never understood why some manufacturers continue to assign all the action in the first or last half of a pot's rotation when the remainder is never used.

Square One Dynamics really can do an awful lot of different things and there's a lot of processing to play with in what is not very much space at all. It's a very timely and interesting box of tricks that, while it may have been intended for live use, undoubtedly has enormous potential for any studio environment. Good gear. ■

PROS

Great package of processing; very capable and varied compression; sounds great; much too good for live!

CONS

Legending not great in half-light; there's a lot of channel in not a lot of panel.

EXTRAS

Klark Teknik's Square One Graphic has 45mm faders with integral dust guards;



signal present and clip LEDs; fully balanced I-Os; relay activated bypass; Proportional Q filters; high pass and low pass filters; universal power supply and a 3U steel chassis.

Contact

KLARK TEKNIK, UK:
Website: www.ktsquareone.com