Gear Drum 3CS-14_SN

We were fortunate to get access to a prototype of Gear Drum’s multi-sensor kit which will soon be available.

Again, this system is no doubt inspired by Alesis, ATV and Roland and their move to multiple sensors as a way of avoiding the hotspotting associated with central sensors.

The kit, like the IRIS, consists of a platform with three tensioned arms, each of which holds a piezo and cone.

Like the IRIS, this is a drop-in no-screw solution, but with the 3CS, it is important to get the cone height correct right off as there is no way of adjusting it once it’s positioned. (Finetuning may be available in future versions).

This kit was supplied with the integrated external jack assembly described previously – again, easy to install and it looks good on the drum.

Performance-wise, this model sacrifices positional sensing in favour of even triggering which is sometimes hard to achieve, especially at the extremities of larger drums.

On the mimicPRO, the three-sensor 3CS was eminently playable with stock R-PD-125 and R-PD-128 presets, with the 125 performing slightly better for rim triggering. In both settings; however, some rim boost was required in the zone adjustments. The
trigger was sensitive enough for the lightest ghost notes and coped equally well with hard hits.

While the PD125 and PD128 presets on the Roland TD-30 produced good triggering response, switching to the utility PAD2 setting improved the overall performance across all aspects – overall sensitivity and responsiveness, dynamics and triggering. Absolutely no refinements were needed and, indeed, any alterations to threshold, sensitivity or head/rim balance actually hindered rather than enhanced performance.

The relatively new 2box Drumlite Three again took a bit of work to dial in because of the vagueness of its presets. Selecting the PadPP (piezo/piezo) preset, quite a lot of tweaking was needed: lowering the threshold below -40 and the gain for both the head and rim, raising the scan time to avoid double triggering and moving away from the default Norm curve to Pos1. However, once dialled in, this trigger performed well – smooth transitions from low to high impacts, even playing around the entire surface of the drum and excellent head/rim separation.

The Roland TD-17 was very accommodating, and the snare triggered well in all the likely presets – PD125X, PD128 as well as the side-trigger PDX12 preset. However, in all cases, the threshold needed to be dropped slightly as sensitivity dropped off noticeably towards the edge of the head in stock settings.

The Yamaha DTX 502 needed no tweaking of the stock dual-piezo preset to produce a wide dynamic range across both the head and rim.

With limited trigger presets, it was not possible to get dual-zone triggering on the older Yamaha DTX 700 on the snare input, so the test was restricted to head only. Performance as a single-zone drum was acceptable.

Paired with the ATV aD5 module, the IRS-14 kit was hard to fault. It worked well with most drum presets and shone with the ATV AD-S13 setting – with a slight rim boost. Sensitivity across the whole surface was impressive, as was the dynamic range.

**The score:**

**Price:** €140

**Ease of construction:** 4.5

**Non-invasiveness:** 4 (air vent grommet needs removal)

**Performance:** 4.8

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**How we tested:**

As in our previous tests, the trigger was installed according to the manufacturer’s instructions into a 14” acoustic shell. This size was chosen in the wake of our external trigger review because it sorts the men from the boys.

The converted drum was tested on the snare input of a range of modules – Pearl mimicPro, ATV aD5, Roland TD-30 and TD-17, Yamaha DTX 700 and 502 and a 2box Drumlite Three. During testing, we started with the most appropriate preset and adjusted the settings for optimal performance.

Our digitalDrummer scorecard measures a number of criteria and, in each case, the top score is five and the worst is awarded one point. For ease of construction, five points means easily done without tools or craft skills; four indicates that some tools are required; three implies the need for removal and or replacement of some drum parts (other than heads), two indicates the need for drilling or soldering and one connotes the need for drilling/part replacement and soldering. The performance score is an average across the modules on which the trigger was tested.