

## Product Highlights

- Variable speed range from 20 to 300 rpm for sensitive to routine sample mixing
- Easy programming eliminating operator training requirements
- Compact design saves bench top space and fits most incubators
- Multi-level bungee cord anchor points to accommodate tall, short and irregular shaped vessels
- Long-life maintenance free motor and drive lowers the cost of ownership





**Non-slip Surface and Multi-level Bungee Cord**  
anchor points for multiple vessel sizes and shapes

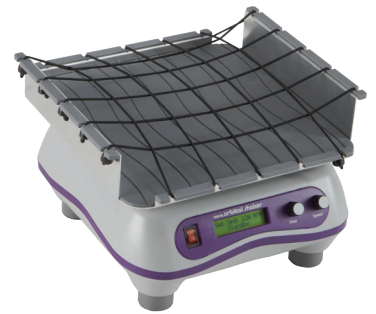
**Two Control Knobs**  
for time and speed make programming quick and simple

**Back-lit Display**  
is easy to read

## Digital Orbital Shaker

The Digital Orbital Shaker, by Heathrow Scientific, is compact yet packed full of high-end features making it a dependable and versatile shaker for a vast range of protocols. Applications include incubators, cold rooms, cell cultures, immunoassays, and protein studies.

- Last run memory, even after the unit has been turned off helps streamline processes and enables reproducible results
- Robust metal tray includes a removable non-skid silicone mat to help hold vessels securely in place
- Modern compact design saves bench top space and fits most incubators
- Body made from durable ABS to resist most commonly used chemicals and is easy to clean
- Quiet operation helps users stay focused in the lab
- Audio signal sound for process completion when the timer is used, so the shaker doesn't have to be supervised.
- No-stop electric motor feedback enables the unit to instantly adjust to weight load changes and unbalanced loads for truly reproducible results
- Speed range of 20 to 300 rpm (1 rpm increments) for sensitive sample agitation to more vigorous applications
- Soft-start feature slowly increases to desired speed to avoid splashing
- Shut-off feature for higher speeds reduces spill occurrences from full vessels
- Three-year warranty ensures a quality that can be trusted and reduces down-time
- A loading weight of 10 lbs. (4.5 kg.) with an overload protection cut off to keep users safe and prevent wearing of the motor
- Spill-resistant tray and body design help direct fluids away from internal components for longer life



**5**  
Year  
Warranty

### See how it works!

Scan the QR Code for a quick video of the Digital Orbital Shaker in action!



# ? FAQ



## Are other shaker accessory platform trays available?

The unique design and shape of the shaker platform tray means that you can accommodate a vast array of containers and vessels that most typical laboratories require to shake. So, there is no need to have, or to spend more on different tray options. With the 'Hi-Lo' sides and the fact you can create your own holding patterns with the elasticated cords provided, you can accommodate, assay plates, dishes, Erlenmeyer flasks, reagent bottles, irregular shaped vessels and much more besides.

## Can you use the shaker in an incubator?

Yes. The amount of heat generated by the shaker is incredibly small and will have little to no effect on an incubator's temperature. Even those set at ambient or below. Unlike a lot of competitor's units of a similar size, we employ a high-quality motor that is working well within its performance capability and not at the top end of it; even with a full load at top speed. The harder a shaker must work, the more heat it will generate. Recommended for standard and cooled incubators, not CO<sub>2</sub> versions

## Can you consistently reproduce the shaker's performance?

Yes. It comes down again to the quality of the motor we use. When you set a desired speed, the shaker will deliver that speed regardless of the load weight. Often shakers that use a lower quality motor will be 'trying' to do the speed set, even if the display tells you it is at the set speed. When you add or take off some load weight, they can visibly be seen to speed up or slow down accordingly. Our powerful motor instantly recognizes load change and seamlessly adjust for truly reproducible results.

## How long can you leave the shaker on continuous mode?

Literally for as long as you require. Whether your protocol requires consistent shaking for hours, days, weeks or months, this shaker more than cope with your needs.

## How does the soft start help prevent splashing?

When you start the shaker, it doesn't cut in immediately at the speed set, as a lot of shakers do, but builds up to the speed to help create a vortex/swirl in the vessel. This only takes a matter of seconds, but dramatically helps reduce any potential splashing.

## Is the shaker suitable for sensitive cell lines and delicate gels?

Yes. With a starting speed of just 20rpm this is ideal for aerating delicate cell lines and de-staining low percentage agarose or acrylamide gels for example.

## Can you change the speed whilst the unit is running?

Yes, you can set the speed and the time before starting, if you are shaking for set periods of time, but if required you can change the speed manually whilst the unit is running.

## How easy is the shaker to clean?

You can clean using standard disinfectants and solutions that are compatible with ABS and Aluminium. The silicone edge pieces and tray mat are fully removable, and the tray is seamless. The tray shape helps prevent any liquids from getting inside the shaker.

## How stable is the shaker at high speed and full load?

The shaker will not 'walk' or move, even on the most challenging of surfaces. This is due to the design of the feet and the heavy counter balance weight that is internally centrally located on the bottom of the shaker.

## Can you replace the accessories for the shaker?

Yes. If you need to replace worn bungee cords (there are spares provided as standard) and worn/soiled silicone mat or edge guards, then all these items are stocked and available.



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### Did you know?

Heathrow Scientific has strict standards that include 3<sup>rd</sup> party plant reviews and 100% multi-level product inspections. These actions result in a 99.7% reliability on our equipment and 99.99% reliability on our laboratory supplies.

### Safety certified and approved

Meets international standards.

## Digital Orbital Shaker

Item No.	L x W x H		Platform Interior W x D		UOM
	in	cm	in	cm	
120460	12.4 x 7.8 x 12.2	31.4 x 19.7 x 31	11 x 11	27.9 x 27.9	1 ea

### Specifications

<b>Speed Range</b>	20-300 rpm, 1 rpm increments
<b>Orbit Diameter</b>	19 mm (0.8")
<b>Time Range</b>	0 to 74 hours and 59 minutes, 1 second increments or continuous
<b>Maximum Load</b>	4.5 kg (10 lbs.)
<b>Mixing Surface</b>	165 mm diameter, silicone mat 160 mm diameter
<b>Operating Temp.</b>	Range 2°C to 40°C
<b>Max. Relative Humidity</b>	Non-condensing, 80% for temperatures up to 31°C decreasing linearly to 50% R.H. at 40°C
<b>Weight</b>	9.80 kg (21.6 lbs.)

### Electrical

Power Adapter Rating	Level VI
	Input 100-240 VAC 50/60 Hz 1.0 A
	Output 12 VDC 2.2 A
Shaker Rating	Input 12 VDC
	Current (under load) Approx. 1.5 A
	Power Approx. 18 W

**Warranty** 5 years, for indoor use ONLY

**Certifications** CE, SGS, RoHS2, WEEE



### Package Includes

- Digital Orbital Shaker
- Skid-free rubber platform mat
- 8 bungee cord set
- Universal hi-lo platform with soft rubber edge bumpers
- 1 low voltage, double insulated power adapter with 4 interchangeable plugs



### Shaker Tray Capacity Guide Includes (not limited to)

- 6 standard or deepwell assay plates (more if stacking of plates is an option)
- 25 x 50ml Erlenmeyer Flasks
- 16 x 125ml Erlenmeyer Flasks
- 9 x 250ml Erlenmeyer Flasks
- 4 x 500ml Erlenmeyer Flasks
- 4 x 1L Erlenmeyer Flasks
- 1 x 2L Erlenmeyer Flasks
- 36 x 50ml Beakers
- 25 x 100ml Beakers
- 16 x 250ml Beakers
- 9 x 400ml Beakers
- 4 x 1L Beakers
- and More!

