

GYROMAX™ 747 & 747R ORBITAL INCUBATOR SHAKERS



Incubate and Shake it to the Max...with GYROMAX!

The **GYROMAX™ 747 and 747R Orbital Incubator Shakers** are designed to accommodate as many clamps of a given size as that in a chest-type shaker, but have the advantage of accommodating shelves for incubation and the stacking of two units to save space. The double-walled construction, with 1.25" of insulation and a triple-paned, evacuated viewing glass window, minimizes heat loss. This construction, together with an efficient circulation system, ensures unrivaled optimum temperature uniformity throughout the chamber.

The temperature is microprocessor controlled and is monitored accurately by a Pt-100 RTD. It is set digitally and reproducibly from a membrane keypad and displayed by an LED to within 0.1°C. The working temperature is from 5°C above ambient to 80°C for the 747, and 4°C to 80°C for the 747R. Independent high and low limit thermostats protect the chamber from overheating and overcooling. The timer is programmable for up to 99 hours or for continuous operation.

A large, quiet fan ensures air and temperature uniformity throughout the stainless steel chamber. A brushless, maintenance-free drive motor generates speeds from 25 to 400 RPM that is displayed digitally. At the same RPM, the standard shaking orbit of 25 mm provides a higher oxygen transfer rate (OTR) compared with shakers with a 19 mm orbit because OTR is directly proportional to orbit size. The motor incorporates a built-in fan that lowers its operating temperature and thereby prolongs its life. A triple-eccentric drive with counter-balancing weights provides smooth and quiet shaking without the need for adjustments as the load changes. The shaking stops when the door is opened. The chamber lamp is turned on and off with a switch on the control panel. The 26" x 21" platform can accommodate Erlenmeyer flasks up to 6 liters.

Optional accessories include: platforms, clamps, spring racks, tube racks, plate holders, and a 30-port gassing manifold that permits direct gassing into flasks or other vessels. Platform holes are drilled to accommodate the different clamps purchased. The spring rack is designed for holding tubes in a horizontal, angled, or upright position. It can also be used to hold flasks up to 1-liter without clamps. The rack consists of a 2-tier grid of springs. The distance between spring racks is adjustable to accommodate tubes and flasks of different heights. They are mounted onto the platform by four screws.

Amerex Instruments, Inc.

GYROMAX™ 747 & 747R INCUBATOR SHAKERS

SPECIFICATIONS	747	747R
Temperature Range	5°C above ambient to 80°C	4°C to 80°C
Temperature Control	PID microprocessor temperature controller, Pt-RTD sensor	
Temperature Display	Digital to 0.1°C	
Accuracy/Uniformity	±0.1°C/±0.5°C at 37°C	
Speed Range	20 to 400 RPM measured directly by a speed sensor for accuracy	
Display	Digital	
Orbit	25mm (1") orbit provides higher oxygen transfer rate than 19mm	
Timer	Programmable up to 99 hours or for continuous operation	
Insulation	1.25" double-wall housing w/ polyurethane insulation minimizes heat loss	
Safety Features	Shaking stops when door is opened. An independent high-limit thermostat protects samples from overheating. An independent low-temperature thermostat (747R only) prevents samples from over-cooling. Auto-restart after power failure.	
Stacking	Two can be stacked and coupled to save space.	
Shelf	One supplied, additional shelves optional	
Viewing Window	Triple-pane 1.25" (30mm) thick	
Spring Rack	Accommodates an accessory spring rack that can shake flasks up to 1-L without the use of clips or clamps as well as 15-mL or 50-mL falcon tubes placed horizontally, vertically, or at 45° to the platform	
Drive	Dynamically balanced triple-eccentric drive with counter-balancing weights provides stable shaking without the need for adjustments as the load increases	
Motor	Maintenance-free, brushless motor with a built-in cooling fan	
Chamber Dimensions	28"W x 23"D x 23.6"H (713mm x 585mm x 600mm)	
Platform Dimensions	26"W x 21"D (660mm x 530mm)	
Overall Dimensions	39.5"W x 28"D x 32.6"H (1094mm x 713mm x 830mm)	39.5"W x 28"D x 39.8"H (1094mm x 713mm x 1010mm)
Power Source	120V(or 220V), 50/60Hz, 12A	120V (or 220V), 50/60Hz, 15A

FLASK CAPACITY

Flask Size (mL)	50	125	250	500	1000	2000	2800	4000	6000
No. of Flasks	112	63	42	30	15	12	6	6	4

ACCESSORIES:

Holders for Tube Racks & Plates



Full Size Spring Rack



Platform with Custom Spring Rack and Other Accessories



Flask Clamps



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