

Grant-bio

Rotator PS-3D

Operating instructions



Contents

1	Safety.....	4
2	General Information	5
3	Getting Started	6
4	Operation of PS-3D	7
5	Specifications	8
6	Guarantee and service.....	9

1. Safety

The following symbol means:



Caution! Read these operating instructions fully before use and pay particular attention to sections containing this symbol.

GENERAL SAFETY

- ☞ Operation of the unit must be carried out according to the given instruction manual.
- ☞ The unit should be saved from shocks and falling.
- ☞ The unit must be stored and transported only in a horizontal position (see marking on the package).
- ☞ After transport or storage in humid conditions dry out the unit (2-3 hrs) before connecting it to the supply voltage.
- ☞ Before using any cleaning or decontamination method except those recommended by the manufacturer, user should check with the manufacturer that the proposed method will not damage the equipment.
- ☞ Do not make modifications in design of the unit.

ELECTRICAL SAFETY

- ☞ Ensure that the mains switch and external power supply connector are easily accessible during use.
- ☞ Connect only to a power supply with a voltage corresponding to that on the serial number label.
- ☞ Only use the external power supply unit provided with this product.
- ☞ If liquid is spilt inside the unit, disconnect it from the external power supply and have it checked by a competent person.
- ☞ Before moving, disconnect from the power supply.
- ☞ To turn off the unit, disconnect the external power supply from the power outlet.

DURING OPERATION

- ☞ Do not impede the platform motion during operation.
- ☞ Do not place a load exceeding 0.5 kg on the platform.
- ☞ Do not operate the unit in premises with aggressive or explosive chemical mixtures.
- ☞ Do not operate the unit outside the laboratory premises.
- ☞ Do not operate the unit which have not been correctly installed or repaired.

BIOLOGICAL SAFETY

- ☞ It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilt on or inside the equipment.

2. General Information

- 2.1 The PS-3D rotator has been designed to enable up to 7 days reliable continuous operation. It is suitable for a variety of applications including blood sample mixing, minigel staining / destaining washes and blot hybridizations.
- 2.2 The PS-3D provides three-dimensional smooth rotation. Units are supplied with a standard platform with a non-slip rubber mat. Accessory tube adaptors are available to accommodate 26 tubes with diameter up to 11 mm or choose the versatile dimpled mat adaptor to accommodate a variety of tube sizes.
- 2.3 The PS-3D rotator is a compact device with a low energy consumption. It can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C.

3. Getting started

3.1 Unpacking

Remove packing materials carefully, and retain for future shipment or storage of the unit.

3.2 The Rotator set includes:

- Rotator PS-3D 1 piece
- A platform with a rubber mat 1 piece
- An external power supply 1 piece
- Specifications; Operating Manual; CE Certificate 1 copy

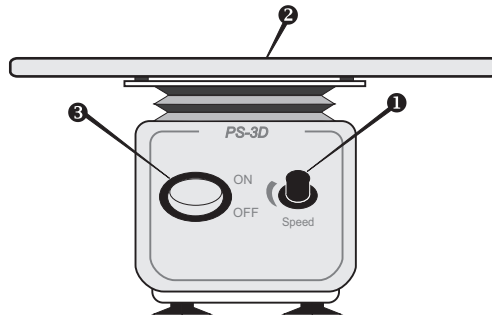
3.3 Optional extras

- PTP-26 Tube adaptor for 26 tubes of up to 11mm diameter
- PDM Dimple mat

3.4 Set up

- Install the platform aligning the pins on the rear side of the platform into the holes on the moving base.
- Plug the external power supply unit into the socket at the rear side of the Rotator.

4. Operation of PS-3D



- 4.1 The principle of the operation of the Rotator is based on the *3D rotation* of the Rotator platform with a constant angle and variable speed of movement.
- 4.2 The speed dial (❶), controls the intensity of the *3D rotation*.
- 4.3 Connect the external power supply to the mains outlet.
- 4.4 Place plates or tubes on the Rotator platform (❷).
- 4.5 Press the switch (❸) to the **ON** position.
- 4.6 Using the speed control (❶), to adjust the *3D rotation* to the required setting.
- 4.7 After use press the switch (❸) to the **OFF** position, and remove power supply from the supply.

5. Specifications

5.1 Rotator provides:

- smooth *3D rotation* of the platform
- even amplitude across the whole platform of Rotator;

5.2 Specifications

- **3D rotation range** 5-60 RPM
- **Platform incline angle** 7°
- **Continuous operation time of Rotator** 168 hours (max)
- **Dimensions of platform working area** 200x200 mm
- **Dimensions of the Rotator** 85x150x80 mm
- **Maximum load** 0.5 kg
- **Input current/power consumption**..... 12V, 260 mA / 3.1 W
- **External power supply** input AC 100-240 V 50/60Hz, output DC 12V
- **Weight with power supply, not more than** 1.4 kg
- The product is designed for operation indoors in a laboratory at altitudes up to 2000m, with ambient temperature from +4°C to +40°C and maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.

Company retains the right to make changes and supplements in product design aimed at enhancement of consumer performance and operation quality without prior notice.

6. Guarantee and Service

6.1 **Guarantee**

When used in laboratory conditions and according to these working instructions, this product is guaranteed for TWO YEARS against faulty materials or workmanship.

6.2 **Service**

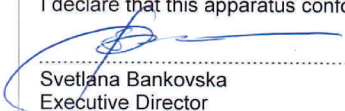
For service, return for repair to our Service Department in the UK or, in other countries, to our distributor.

Declaration of Conformity

Manufacturer:	BIOSAN LTD. Ratsupites 7, build.2, Riga, LV-1067, Latvia
Equipment name/type number:	PS-3D
Description of Equipment:	Rotator
Directives:	EMC Directive 2004/108/EC Low Voltage Directive 2006/95/EC

Applied Standards	
Harmonized Standards:	<u>EN 61326-1:</u> Electrical equipment for measurement, Control and laboratory use - EMC requirements General requirements <u>EN 61010-1:</u> Safety requirements for electrical equipment for measurement, control and laboratory use General requirements

I declare that this apparatus conforms to the requirements of the above Directive(s)


.....
Svetlana Bankovska
Executive Director
Biosan Ltd.

Dated 06.04.2011.....

Grant-bio

**Grant Instruments
(Cambridge) Ltd**
Shepreth,
Cambridgeshire
SG8 6GB
UK

Tel: +44 (0)1763 260811
www.grantinstruments.com
sales@grantinstruments.com
Fax: +44 (0)1763 262410