

Grant bio

Rocker PMR-30

Operating instructions

For version V.2GW



Contents

1	Safety.....	4
2	General Information.....	5
3	Getting Started.....	6
4	Operation of PMR-30.....	7
5	Specifications.....	9
6	Guarantee and service.....	10

1. Safety

The following symbols mean:



Caution! Make sure you have fully read and understood the present Operating instructions before using the equipment. Please pay special attention to sections marked by this symbol.

GENERAL SAFETY

- ☞ Use only as specified in the Operating instructions provided.
- ☞ The unit should not be used if dropped or damaged.
- ☞ The unit must be stored and transported in a horizontal position (see package label).
- ☞ After transport or storage in humid conditions keep the unit under room temperature for 2-3 hrs before connecting to electric circuit.
- ☞ Use only cleaning and decontamination methods recommended by the manufacturer.
- ☞ Do not make modifications to the design of the unit.

ELECTRICAL SAFETY

- ☞ Connect only to a power supply with voltage corresponding to that on the serial number label.
- ☞ Only use the external power supply unit provided with this product.
- ☞ Ensure that the power switch and external power supply are easily accessible during use.
- ☞ Disconnect the unit from the electric circuit before moving.
- ☞ Turn off the unit by disconnecting the external power supply unit from the power socket.
- ☞ If liquid penetrates into the unit, disconnect it from the external power supply and have it checked by a competent person.

DURING OPERATION

- ☞ Do not impede the platform motion.
- ☞ Do not operate the unit in environments with aggressive or explosive chemical mixtures.
- ☞ Do not operate the unit if it is faulty or has been installed incorrectly.
- ☞ Do not use outside laboratory rooms.
- ☞ Do not place a load exceeding the maximum load value mentioned in the specifications section of these operating instructions.

BIOLOGICAL SAFETY

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

2. General Information

The Rocker PMR-30 has been designed to enable up to 7 days reliable continuous operation.

The Rocker PMR-30 provides controlled gentle rocking motion for mixing of samples in vessels placed on the platform. The Rocker PMR-30 is an extremely quiet compact unit fitting neatly into a limited workspace. Ideal for personal use. The unit is designed for the mixing of samples.

The Rocker PMR-30 is ideal for minigel destaining after electrophoresis, conducting reactions of Northern, Southern and Western blots and washes. The unit is applicable in all the areas of biomedicine, biotechnology and microbiology laboratory research.

3. Getting started

3.1 Unpacking

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

Examine the unit carefully for any damage incurred during transit. The warranty does not cover in-transit damage.

3.2 The PMR-30 set includes:

Standard set

- Rocker PMR-30.....1 piece
- removable platform1 piece
- rubber mat.....1 piece
- external power supply unit1 piece
- Operating instructions; Declaration of Conformity.....1 copy

Optional accessories

- PDM dimpled mat1 piece

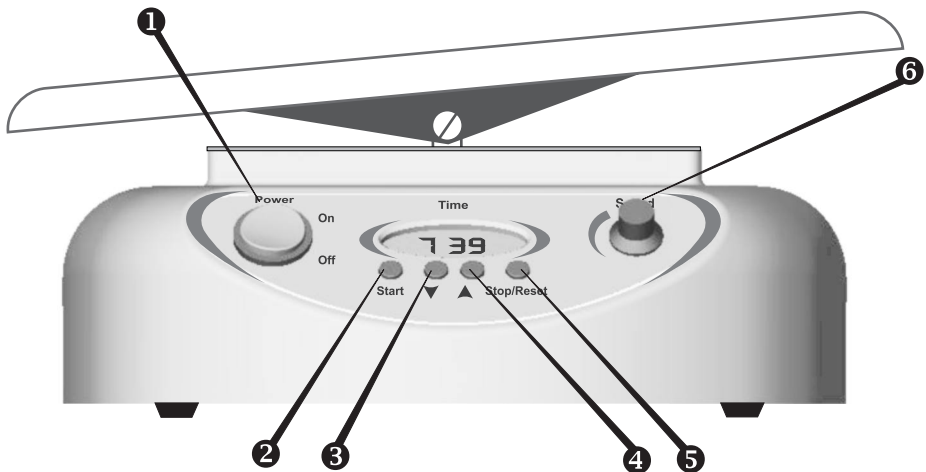
3.3 Set up:

- Place the unit onto an horizontal even working surface;
- Plug the external power supply unit into the 12 V socket at the rear side of the unit.

3.4 Platform installation

Install the platform fitting the pins on the bottom side of the platform into the holes on the moving base.

4. Operation of PMR-30



- 4.1. Connect the external power supply unit to the electric circuit.
- 4.2. Place samples on the platform.
- 4.3. Switch **On** the **Power** switch (1) (the timer display (3) will light).
- 4.4. Using the ▲ and ▼ keys (4) set the working time. The set time is displayed on the timer indicator in hours and minutes (hh:mm).
- 4.5. Press the **Start** key (2). The platform will start rocking movement and the timer will start counting up the set time interval. Timer display shows actual elapsed time: till 1 hour – in minutes and seconds (min:sec), after 1 hour – in hours and minutes (hh:mm).
- 4.6. Set the shaking speed as recommended, using the **Speed** knob (6)
- 4.7. After the set time interval expires the platform movement will stop and the set working time will be shown on the timer display.
- 4.8. Press the **Start** key to repeat operation with the same working time and speed.

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- 4.9. The unit can be stopped before the set time elapses if necessary by pressing the **Stop** key (Fig. 1/⑥). For 20 seconds the time indicator will be showing the time the shaker has worked, and after that it will be showing the set time.
 - 4.10. Pressing the **Stop** key for more than 3 seconds resets the set time.
 - 4.11. If the working time is not set (or reset) and the display shows 0:00, pressing the **Start** key will start time indication and will cause the unit to operate non-stop until the **Stop** key is pressed.
 - 4.12. After finishing the work turn the **Power** switch to the **Off** position. Disconnect the external power supply unit from the electric circuit.

5. Specifications

5.1 Rocker should provide:

- Soft rocking of the platform with a constant amplitude;
- Smooth regulation of the rocking speed;
- Display and setting of the operating time;
- Interruption of the operation at any moment;

5.2 Specifications

The product is designed for operation indoors in a laboratory at altitudes up to 2000 m, 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.

- Mixing frequency range.....5–30 oscill/min
- Fixed tilt angle7°
- Digital time setting.....1 min – 24 hrs / non-stop
- Maximum continuous operation time168 hrs
- Maximum loading.....0.5 kg
- Platform working area200 x 200 mm
- Dimensions220x205x120 mm
- Input current/power consumption.....12 V, 320 mA / 3.8 W
- External power supply input AC 100-240 V 50/60 Hz, output DC 12 V
- Weight*.....2.1 kg

* Accurate within $\pm 10\%$.

Optional accessory	Description
PDM	Dimpled mat to prevent different size tubes from rolling

Grant is committed to a continuous programme of improvement, specifications may be changed without 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.

6.3 **Cleaning & disinfection**

Standard ethanol (75%) or other cleaning agents recommended for cleaning of laboratory equipment can be used for cleaning and disinfection of the unit.

Declaration of Conformity

Manufacturer:	BIOSAN LTD. Ratsupites 7, build.2, Riga, LV-1067, Latvia
Equipment name/type number:	PMR-30
Description of Equipment:	Rocker
Directives:	EMC Directive 2004/108/EC Low Voltage Directive 2006/95/EC

Applied Standards	<u>EN 61326-1:</u> Electrical equipment for measurement, control and laboratory use - EMC requirements General requirements
Harmonized Standards:	<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 06.09.2011

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