# Digital Shaker Rotator DSR-10

**Operating Instructions** 

#### **Proper use**

The DSR-10 digital shaker rotator is suitable for usage in various attachments for mixing liquids in bottles, flasks, test tubes and bowls for a maximum supported weight of 7,5 kg. It is designed for use in laboratories. The motion of the agitation table or of the containers placed on it is circular or horizontal.For usage in accordance with requirements, the machine must be standing on a stable, even surface that is as slip-free as passible. In addition, care must be taken that qbjects in the vicinty are a sufficient distance away from the agitator and that they will not come too close to the agitator while it is in operation.

#### Main technical data:

Shaking movement	Orbital	
Orbital diameter [mm]	10	
Max. shaking weight (with attachment) [kg] 7.5		
Speed range [rpm]	100-500 (1  step = 10  rpm)	
Speed and time display	LCD	
Time setting range	1min-19h59min (1 step=1min)	
Run type	Timing/Continuous mode	
Permissible ambient temperatur	e [°C] 5-40	
Permissible relative humidity	80%	
Protection class acc. to DIN EN	IEEE IEEE IEEE IEEE IEEE IEEE IEEE IEE	
RS232 interface	YES	
Voltage [VAC]	100-240	
Frequency [Hz]	50/60	
Power [W]	35	

## **Method of Application**

#### 1. Setting the agitation time

The amount of time required for the agitation process can be adjusted with aid of the right turn button and is shown on the right display. If a target time(max. 19h 59min)is set in the right display or has been saved from previous agitation processes, you can activate or terminate the agitation process with the left turn button while setting the target speed. You can exit timed mode and interrupt the agitation process by pressing on the right turn button..

2. Setting the speed

The target speed and upper speed limit (max.500 rpm) required for the agitation process can be set with the aid of the left turn button and are shown on the left display. Continuous mode is activated by pressing the left turn button. If a target time is set in the right display in continuous mode or is saved from previous agitation processes, the agitation process can be continued in continuous mode by pressing the right turn button. The agitation process can be terminated by pressing the left or the right turn button.

## Attentions:

- 1. To prevent the foot of the device from coming loose by itself, hold down the foot with one hand and tighten the oppsite hexagonal nut with the other hand until it is finger tight.
- 2. All ordering attachment is secured in place by four lateral clamping screws on the universal attachment.

#### **Attachments:**

Power code	1	pcs
Universal attachment	1	pcs

## **Ordering Attachments:**

1. Working plate with beam barrel clamp (with 8 beam barrels)

Working plate with beam barrel clamp is suitable for working with round flasks, measuring flasks and Erlenmeyer flasks.

2. Flatbed working plate

For gentle agitation at low speed, for example for Petri dishes or culture flasks. The flatbed working plate is equipped with an anti-slip sheet that prevents the dish from moving around during the agitation process.

- 3. Working plate of four-jaw chunk
- 4. Fixing Clips For 25 ml conical beaker (using with Working plate of four-jaw chunk)
- 5. Fixing Clips For 50 ml conical beaker (using with Working plate of four-jaw chunk)
- 6. Fixing Clips For 100 ml conical beaker (using with Working plate of four-jaw chunk)
- 7. Fixing Clips For 200/250 ml conical beaker (using with fixing clip attachment)
- 8. Fixing Clips For 500 ml conical beaker (using with fixing clip attachment)