

# Rockers, Shakers, Rotators



## MR-1, Mini-Rocker Shaker (Upgraded)



**New!** Mini-Rocker Shaker **MR-1** shaker has been upgraded to provide reliable continuous operation and smooth platform motion at lower speed. Non-stop mode up to 7 days and over 2 years trouble-free operation are guaranteed by use of direct drive mechanism and brushless motor.

**MR-1** provides regulated gentle rocking motion of the platform and mixing of liquid components.

It is a compact, noiseless device designed for personal use.

Ideal for minigel destaining after electrophoresis, conducting reactions of Northern, Southern and Western blots.

Non-slip rubber mat located on the shaker's platform provides stable position for vessels during shaking.

Rocker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

### Specifications:

|   |   |
|---|---|
| <b>New!</b> Mixing frequency range          | 5–30 oscill/min                                       |
| Fixed tilt angle                            | 7°  |
| <b>New!</b> Max. continuous operation time  | 168 hrs   |
| <b>New!</b> Direct drive mechanism          |   |
| Digital timer with sound alarm              | 1 min to 23 hrs 59 min<br>(with automatic switch off) |
| Non-slip rubber mat is supplied as standard |   |
| Maximum load                                | 0.5 kg  |
| Display                                     | LED   |
| Platform working area                       | 200 × 200 mm  |
| Overall dimensions (W × D × H)              | 220 × 205 × 120 mm                                    |
| Weight, not more                            | 2 kg  |
| Input current/power consumption             | 12V, 320 mA / 3.8 W                                   |
| External power supply                       | Input AC 100-240 V 50/60Hz;<br>Output DC 12V          |

**New!** Warranted service life **24 months**

### Accessories for the standard platform:

- A** Optional adapter **TP-26** for 26 tubes up to 11 mm diameter
- B** Optional dimpled mat **PDM** prevents different size tubes from rolling around the platform

### Catalogue number:

|                                    |               |
|------------------------------------|---------------|
| <b>MR-1</b> with standard platform | MA-010152-AAG |
| <b>A</b> TP-26                     | MA-010105-AK  |
| <b>B</b> PDM                       | PDM           |

### **A** Adapter TP-26

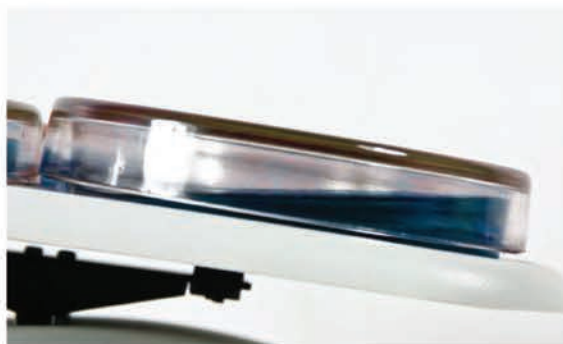


Rocking uni-rotation

MR-1 with PDM dimpled mat



MR-1 with Petri dishes



### **B** PDM





Rocker-shaker **MR-12** provides both soft and intensive mixing of solutions or nutrient media in vessels or plastic bags placed on the platform. Adjustable speed and platform tilt angle allows setting parameters for optimal solution transfer and mixing.

The device is ideal for gel destaining after electrophoresis and homogenisation of bioextraction media. It is optimal for biomolecule hybridization on strips and for staining/destaining procedures. When installed inside bioincubator it is ideal for growing cells and cell cultures in disposable plastic reactor-bags (working volumes up to 10 litres, media volumes up to 5 litres).

Rocker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

**Specifications:**

|  |   |
|--|---|
| Mixing frequency range                   | 1–99 oscill/min<br>(increment 1 oscill/min)                                     |
| Tilt angle range (from 1–50 oscill/min)  | 0°–9° (increment 1°)  |
| Fixed tilt angle (from 51–99 oscill/min) | 10°   |
| Platform working dimensions              | 460 × 360 mm<br>(Platform with non-slip rubber mat is included in standard set) |
| Digital timer with sound alarm           | 1 min–99 hrs 59 min<br>(increment 1 min)  |
| Display                                  | LCD, 16 × 2 signs   |
| Maximum continuous operation time        | 168 hrs   |
| Maximum load                             | 5 kg  |
| Overall dimensions (W × D × H)           | 400 × 480 × 250 mm  |
| Weight, not more                         | 13 kg   |
| Input current/power consumption          | 12V, 1.1 A / 13W  |
| External power supply                    | Input AC 100-240 V 50/60Hz;<br>Output DC 12V                                    |

**Catalogue number:**

|                                     |               |
|-------------------------------------|---------------|
| <b>MR-12</b> with standard platform | MA-010130-AAI |
|-------------------------------------|---------------|

## 3D, "Sunflower" Mini-Shaker



**New!** The new version of the popular 3D shaker is designed for reliable continuous operation. Non-stop mode up to 7 days and over 2 years trouble-free operation are guaranteed by use of direct drive mechanism and brushless motor.

Shaker 3D provides adjustable three-dimensional smooth rotation of the platform suitable for accommodation of a tube adaptor TP-26 for 26 tubes with diameter up to 11 mm or versatile adapter for tubes of different sizes PDM.

The shaker is a compact device with low energy consumption. Non-slip rubber mat (supplied with product) on the shaker platform provides stable position for vessels during shaking.

The shaker is designed for mixing blood samples, for minigel staining and destaining, washes blot hybridization.

Shaker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C.

### Specifications:

|  |  |
|--|--|
| <b>New!</b> Speed control range            | 5 – 60 rpm                                   |
| Fixed tilt angle                           | 7°   |
| <b>New!</b> Direct drive mechanism         |  |
| <b>New!</b> Max. continuous operation time | 168 hrs                                      |
| Maximum loading                            | 0.5 kg                                       |
| Platform working area                      | 200 × 200 mm                                 |
| Overall dimensions (W × D × H)             | 85 × 150 × 80 mm                             |
| Weight, not more                           | 1.2 kg                                       |
| Input current/power consumption            | 12V, 2.60 mA/3.1W                            |
| External power supply                      | Input AC 100-240 V 50/60Hz;<br>Output DC 12V |
| <b>New!</b> Warranted service life         | 24 months                                    |

### Accessories for the standard platform:

- A** Optional adapter TP-26 for 26 tubes up to 11 mm diameter;
- B** Optional dimpled mat PDM prevents different size tubes from rolling around the platform.

### Catalogue number:

|  |               |
|--|---------------|
| 3D with standard platform, mat and ext. power supply | MA-010151-AAG |
| <b>A</b> TP-26                                       | MA-010105-AK  |
| <b>B</b> PDM   | PDM           |

#### **A** Adapter TP-26



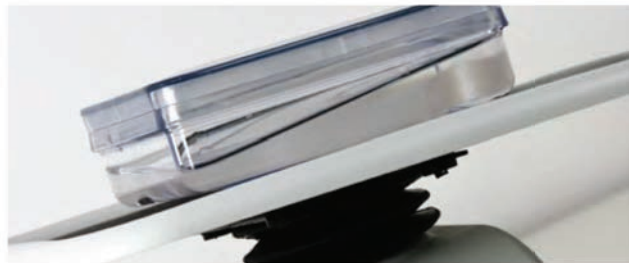
#### **B** PDM



Product video is available on the website

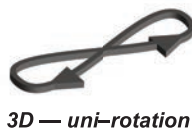
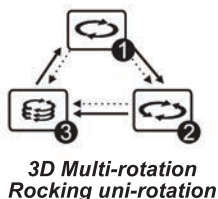
3D — uni-rotation

3D with a gel tank



3D with a PDM mat





Multi Bio 3D with a TP-26 adapter



B PDM



A Adapter TP-26



Multi-shaker **Multi Bio 3D** provides realization of several types of motion in one module. This option of Maikoarray essentially extends possibilities and enhances efficiency of preparation of test samples as well as allows selecting the mixing type according to individual requirements. The multi-shaker is designed for a variety of applications: hybridization reactions, cell growing, gel washing, soft extraction and homogenisation of biological components in solutions.

Microprocessor control allows performing not only **1 Orbital 3D rotation** of the platform, but also **2 Reciprocal 3D motion** (of ping-pong type) as well as **3 Soft vibrating rocking**. These three motion types can be performed separately, pairwise and in cycles, periodically repeating the sequence of three motion types. The shaker is designed for laboratories with increased demands for quality of mixing, extraction and cell growing processes. Non-slip rubber mat located on the shaker platform provides stable position for vessels during shaking.

Shaker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

**Specifications:**

|   |  |
|---|--|
| <b>1 2</b> Speed range                      | 1–100 rpm                                    |
| <i>(Orbital and reciprocal motion)</i>      |  |
| <b>2</b> Turning angle                      | 0°–360° (step 30°)                           |
| <i>(Reciprocal motion)</i>                  |  |
| <b>3</b> Rocking angle                      | 0°–5° (step 1°)                              |
| <i>(Vibro motion)</i>                       |  |
| Fixed platform tilt angle                   | 7°   |
| Orbit diameter                              | 22 mm  |
| Platform working area                       | 200 × 200 mm                                 |
| Non-slip rubber mat is supplied as standard |  |
| Timer for orbital and reciprocal motion     | 0–250 sec                                    |
| Timer for vibro motion                      | 0–5 sec                                      |
| Number of cycle repetitions                 | 0–125 times                                  |
| Maximum load                                | 1 kg   |
| Overall dimensions (W × D × H)              | 235 × 235 × 140 mm                           |
| Weight, not more                            | 2 kg   |
| Input current/power consumption             | 12V, 380 mA / 4.6 W                          |
| External power supply                       | Input AC 100–240 V 50/60Hz;<br>Output DC 12V |

**Accessories for the standard platform:**

- A** Optional adapter **TP-26** for 26 tubes up to 11 mm Ø
- B** Optional dimpled mat **PDM** prevents different size tubes from rolling around the platform

**Catalogue number:**

|  |               |
|--|---------------|
| <b>Multi Bio 3D</b> with stand. platform | MA-010125-AAG |
| <b>A TP-26</b>                           | MA-010105-AK  |
| <b>B PDM</b>                             | PDM           |

## PSU-2T, Mini-shaker for immunology



Shaker **PSU-2T** provides adjustable mixing of reagents in microtest plates. The shaker is a compact and user-friendly device; it occupies small space on a desk. The shaker is ideal for personal use.

Shaker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

### Specifications:

|                                 |  |
|---------------------------------|--|
| Speed range                     | 150–1000 rpm                                 |
| Digital timer                   | 1 min–23 hrs 59 min                          |
| Orbit diameter                  | 2 mm   |
| Overall dimensions (W × D × H)  | 220 × 205 × 90 mm                            |
| Weight, not more                | 2.5 kg                                       |
| Input current/power consumption | 12V, 280 mA / 3.4 W                          |
| External power supply           | Input AC 100-240 V 50/60Hz;<br>Output DC 12V |

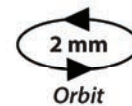
### Platforms for microtest plates:

**IPP-2** (standard platform) for 2 microtest plates

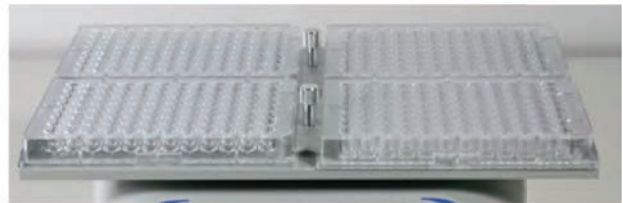
**IPP-4** (optional platform) for 4 microtest plates

### Catalogue number:

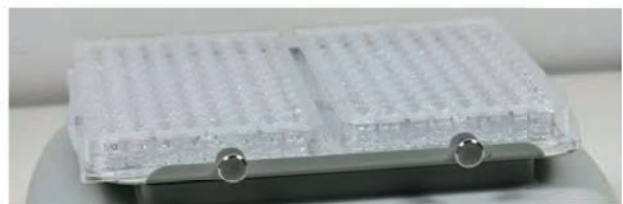
|  |               |
|--|---------------|
| <b>PSU-2T</b> with platform <b>IPP-2</b> | MA-010102-AAG |
| <b>IPP-4</b>                             | MA-010102-AK  |



**B Platform IPP-4**



**A Platform IPP-2**

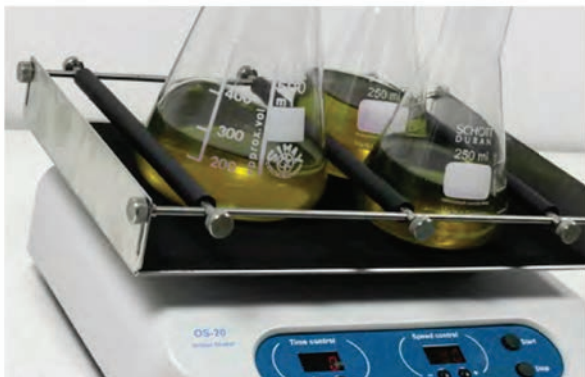




Platform Bio PP-4



Platform UP-12



**OS-20** Orbital Shaker is a powerful variable speed shaker which provides efficient orbital motion. Speed and time are under microprocessor control. Two operation modes are available: 1) **timed** (1–999 min) and 2) **nonstop**, with a maximum operation time of 24 hours.

Five (5) different interchangeable platforms expand possibilities of shaker application in laboratories of different areas: microbiology, chemistry, immunology, biochemistry and molecular biology. Amplitude of 20 mm of the platform shift provides uniform mixing of liquids in flat microtest plates during fulfilment of diagnostic tests, such as VDRL-test. Shaker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

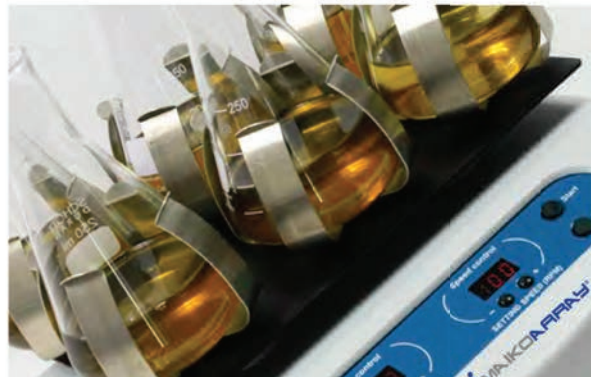
**Specifications:**

|                                 |  |
|---------------------------------|--|
| Speed range                     | 50–250 rpm                                   |
| Digital speed control           |  |
| Orbit diameter                  | 20 mm  |
| Digital timer                   | 1–999 min                                    |
| Display                         | LED  |
| Maximum load                    | 2.5 kg                                       |
| Overall dimensions (W × D × H)  | 270 × 260 × 80 mm                            |
| Weight, not more                | 3.4 kg                                       |
| Input current/power consumption | 12V, 500 mA / 6 W                            |
| External power supply           | Input AC 100-240 V 50/60Hz;<br>Output DC 12V |

**Catalogue number:**

|                               |               |
|-------------------------------|---------------|
| <b>OS-20</b> without platform | MA-010108-AAG |
| <b>UP-12</b>                  | MA-010108-AK  |
| <b>Bio PP-4</b>               | MA-010116-AK  |
| <b>P-6/250</b>                | MA-010108-DK  |
| <b>P-12/100</b>               | MA-010108-EK  |
| <b>P-16/88</b>                | MA-010116-BK  |

Platform P-6/250



## PSU-10i, Orbital Shaker



Shaker **PSU-10i** exceeds its ancestor OS-10 not only in design but also by having a direct drive system, a brushless motor with guaranteed service life up to 35 000 hours and an automatic loading balancing system. These innovations make the new series of shakers even more reliable, especially for the long non-stop operation, and essentially expands the product performance range in both high and low limits.

The shaker is designed for application both in small specialised biotechnological laboratories and in large multidisciplinary laboratories: a choice of five (5) interchangeable platforms provides the possibility of performing various procedures and techniques.

Shaker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

### Specifications:

|                                |  |
|--------------------------------|--|
| Speed range                    | 50–450* rpm (increment 10 rpm)               |
|                                | * Max. speed is dependent on loading         |
| Digital speed control          |  |
| Orbit diameter                 | 10 mm  |
| Digital timer with sound alarm | 1 min–96 hrs                                 |
| Maximum load                   | 3 kg   |
| Overall dimensions (W × D × H) | 220 × 205 × 90 mm                            |
| Weight, not more               | 4 kg   |
| Input current/power consumptio | 12V, 800 mA / 9.6                            |
| External power supply          | Input AC 100-240 V 50/60Hz;<br>Output DC 12V |

### Catalogue number:

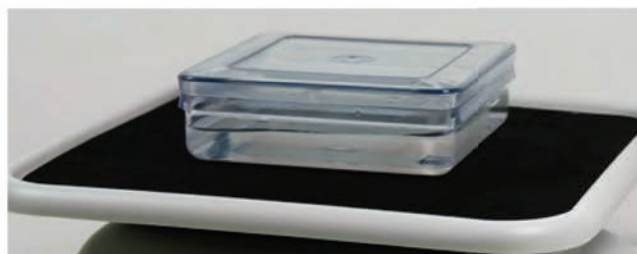
|                                 |               |
|---------------------------------|---------------|
| <b>PSU-10i</b> without platform | MA-010144-AAN |
| <b>UP-12</b>                    | MA-010108-AK  |
| <b>Bio PP-4</b>                 | MA-010116-AK  |
| <b>P-6/250</b>                  | MA-010108-DK  |
| <b>P-12/100</b>                 | MA-010108-EK  |
| <b>P-16/88</b>                  | MA-010116-BK  |



Platform UP-12



Platform Bio PP-4

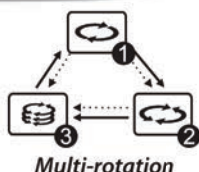


Platform P-6/250

Platform Bio PP-4







Platform PP-20-4



**PSU-20i** is a new orbital shaker in the multi-functional mixing device range. Shaker **PSU-20i** differs from its ancestor Multi PSU-20 not only in a new external design but also by having a direct drive system and a brushless motor with service life up to 35 000 hours. **PSU-20i** is an ideal instrument for different biopharmaceutical and biomedical profile laboratories.

The shaker is designed for application both in small specialised laboratories and in large multidisciplinary laboratories: a choice of nine different interchangeable platforms provides possibility of performing various procedures and techniques. Special attention should be paid to a multilevel platform, which allows accommodation of a large number of various microplates, Petri dishes, cultural bags and other low containers.

Operation of the instrument is noiseless and reliable; the shaker can provide stable continuous mixing for up to 7 days.

The device is multifunctional; it provides three motion types, which can be performed separately, pairwise and sequentially in repeated cycles. Description of the operation modes is shown in a table below. Shaker can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

### Specifications:

|                                 |   |
|---------------------------------|---|
| Digital speed control           |   |
| Speed range                     | 20–250* rpm (increment 5 rpm)<br>* Max. speed is dependent on loading |
| Orbit diameter                  | 20 mm   |
| Digital timer                   | 1 min–96 hrs  |
| Maximum load                    | 8 kg  |
| Overall dimensions (W × D × H)  | 410 × 410 × 130 mm  |
| Weight, not more                | 14 kg   |
| Input current/power consumption | 12V, 3.2 A / 40W  |
| External power supply           | Input AC 100-240 V<br>50/60Hz; Output DC 12V                          |

### Catalogue number:

|                                 |               |
|---------------------------------|---------------|
| <b>PSU-20i</b> without platform | MA-010145-ACI |
|---------------------------------|---------------|

| Motion types | Description   | Speed range | Turning angle      | Motion timer * | General operation timer (1 min step) |
|--------------|---|-------------|--------------------|----------------|--------------------------------------|
| Orbital      | Simple orbital motion with an option of shifting direction (clockwise/anticlockwise) after set time | 20–250 rpm  | —                  | 0–250 sec      | 1 min–96 hrs                         |
| Reciprocal   | Orbital motion with shifting direction of rotation  | 20–250 rpm  | 0°–360° (30° step) | 0–250 sec      | 1 min–96 hrs                         |
| Vibrating    | High speed, low amplitude motion  | —           | 0°–5° (1° step)    | 0–5 sec        | 1 min–96 hrs                         |

\* for switching to the next motion in the cycle

| Platform   | Description  | Dimensions        | Working Dimensions | Used on               | Cat. Number  |
|------------|--|-------------------|--------------------|-----------------------|--------------|
| 1 UP-12    | Universal platform with adjustable bars for different types of flasks                                  | 285 × 215 mm      | 265 × 185          | OS-20, PSU-10i, ES-20 | MA-010108-AK |
| 2 Bio PP-4 | Flat platform with non-slip rubber mat   | 260 × 260 mm      | 235 × 235 mm       | OS-20, PSU-10i        | MA-010116-AK |
| 3 PP-4     | Metallic flat platform with non-slip rubber  | 220 × 220 mm      | 215 × 215 mm       | ES-20                 | MA-010108-BK |
| 4 P-12/100 | Platform with clamps for flasks, 100–150 ml (12 places)  | 250 × 190 mm      | 250 × 190 mm       | OS-20, PSU-10i, ES-20 | MA-010108-EK |
| 5 P-6/250  | Platform with clamps for flasks, 250–300 ml (6 places)   | 250 × 190 mm      | 250 × 190 mm       | OS-20, PSU-10i, ES-20 | MA-010108-DK |
| 6 P-16/88  | Platform with spring holders for up to 88 tubes up to 30 mm diameter (e. g. 10 ml, 15 ml, 50 ml tubes) | 275 × 205 × 75 mm | 275 × 205 × 75 mm  | OS-20, PSU-10i, ES-20 | MA-010116-BK |

1 UP-12



2 Bio PP-4



3 PP-4



4 P-12/100



5 P-6/250



6 P-16/88



| Platform          | Description   | Dimensions         | Working Dimensions | Used on           | Cat. Number  |
|-------------------|---|--------------------|--------------------|-------------------|--------------|
| <b>1 UP-330</b>   | Universal platform with adjustable bars for different types of flasks | 345 × 430 × 105 mm | 345 × 430 × 105 mm | PSU-20i           | MA-010145-AK |
| <b>2 P-30/100</b> | Platform with clamps for flasks, 100–150 ml (30 places)               | 360 × 400 mm       | 360 × 400 mm       | PSU-20i, ES-20/60 | MA-010135-BK |
| <b>3 P-16/250</b> | Platform with clamps for flasks, 250–300 ml (16 places)               | 360 × 400 mm       | 360 × 400 mm       | PSU-20i, ES-20/60 | MA-010135-CK |
| <b>4 P-9/500</b>  | Platform with clamps for flasks, 500 ml (9 places)                    | 360 × 400 mm       | 360 × 400 mm       | PSU-20i, ES-20/60 | MA-010135-AK |
| <b>5 P-6/1000</b> | Platform with clamps for flasks, 1000 ml (6 places)                   | 360 × 400 mm       | 360 × 400 mm       | PSU-20i, ES-20/60 | MA-010135-DK |
| <b>6 PP-400</b>   | Flat platform with non-slip rubber mat                                | 400 × 360 mm       | 400 × 360 mm       | ES-20/60          | MA-010135-FK |
| <b>A PP-20</b>    | Flat platform with non-slip rubber mat                                | 480 × 380 mm       | 465 × 365 mm       | PSU-20i           | MA-010126-BK |
| <b>B PP-20-2</b>  | Flat platform with non-slip rubber mat (2 levels)                     | 480 × 380 × 170 mm | 465 × 365 × 170 mm | PSU-20i           | MA-010126-CK |
| <b>C PP-20-3</b>  | Flat platform with non-slip rubber mat (3 levels)                     | 480 × 380 × 340 mm | 465 × 365 × 340 mm | PSU-20i C         | MA-010126-DK |
| <b>D PP-20-4</b>  | Flat platform with non-slip rubber mat (4 levels)                     | 480 × 380 × 510 mm | 465 × 365 × 510 mm | PSU-20i           | MA-010126-EK |

**1 UP-330**



**5 P-6/1000**



**2 P-30/100**



**6 PP-400**



**3 P-16/250**



**D PP-20-4**



**4 P-9/500**



**C PP-20-3**

**B PP-20-2**

**A PP-20**

## Bio RS-24, Mini-rotator for test tubes with timer



Mini-rotator **Bio RS-24** provides vertical rotation of the platform. The rotator is an ideal instrument for preventing blood coagulation in tubes and for fulfilment of procedures of extraction of biological components.

The device is simple to operate; it is designed as a low cost solution.

Rotator can be used in cold rooms or incubators, operating at ambient temperature range + 4°C to + 40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.



### Specifications:

|                                 |  |
|---------------------------------|--|
| Vertical rotation               | 360°   |
| Speed range                     | 5–30 rpm                                     |
| Digital timer                   | 1 min to 23 hrs 59 min with sound alarm      |
| Overall dimensions (W × D × H)  | 310 × 110 × 175 mm                           |
| Weight, not more                | 1 kg   |
| Input current/power consumption | 12V, 110 mA/1.3 W                            |
| External power supply           | Input AC 100-240 V 50/60Hz;<br>Output DC 12V |

### Catalogue number:

|  |               |
|--|---------------|
| <b>Bio RS-24</b> with platform <b>PRS-22 V</b> | MA-010133-AAG |
| <b>PRS-22</b>                                  | MA-010117-FK  |
| <b>PRS-4/12</b>                                | MA-010117-AK  |
| <b>PRSC-18</b>                                 | MA-010117-EK  |

*Bio RS-24 in operation*



### Platforms description:

| Platform                     | Capacity | Tube Volume            | Tube Diameter      | Cat. number  |
|------------------------------|----------|------------------------|--------------------|--------------|
| <b>1 PRS-22 (standard)</b>   | 22       | up to 1.5 – 15 ml      | up to 15 mm        | MA-010117-FK |
| <b>2 PRS-4/12 (optional)</b> | 4 and 12 | up to 50 and 1.5–15 ml | up to 30 and 15 mm | MA-010117-AK |
| <b>3 PRSC-18 (optional)</b>  | 18       | up to 15 ml            | up to 15 mm        | MA-010117-EK |

**1 PRS-22**



**2 PRS-4/12**



**3 PRSC-18**

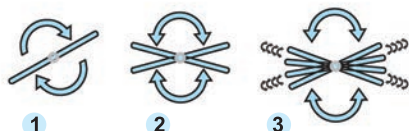


PRS — series platforms are equipped with universal rubber clamps for different size tube fixation;  
PRSC — series platforms have metal clamps able to hold heavier solutions (e.g. soil, sand).



Multi-rotator provides 3 motion types

- 1 Vertical motion
- 2 Reciprocal motion
- 3 Vibro



Multi-rotation

Multi Bio RS-24 with standard platform PRS-26



Multi Bio RS-24 with optional platform PRSC-22



Multi-Rotator **Multi Bio RS-24** performs several motion types in one module. Microprocessor control allows performing not only **Vertical rotation** of the platform, but also **Reciprocal rotation** as well as **Vibration**. These three motion types can be performed separately, pairwise and in cycles, periodically repeating the sequence of three motion types. Multi-rotation option of Maikoarray substantially expands possibilities and enhances efficiency of sample preparation for the examined materials and allows adjusting the mixing procedure according to individual tasks. Multi-Rotator can be used for variety of applications in modern life science laboratories: for hybridization reactions, cell growing, soft extraction and homogenisation of biological components in solutions, as well as for reactions of binding and washing of magnetic particles.

Multi-Rotator can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C. Low voltage external power supply (12 V) provides electrical safety in humid environment.

### 1 Vertical rotation:

|                        |                             |
|------------------------|-----------------------------|
| Speed range            | 1–100 rpm (increment 1 rpm) |
| Vertical rotation      | 360°                        |
| Timer with sound alarm | 0–250 sec                   |

### 2 Reciprocal rotation:

|                        |                             |
|------------------------|-----------------------------|
| Speed range            | 1–100 rpm (increment 1 rpm) |
| Turning angle          | 1–90° (increment 1°)        |
| Timer with sound alarm | 0–250 sec                   |

### 3 Vibro rotation:

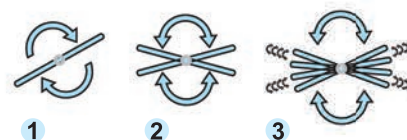
|                   |                     |
|-------------------|---------------------|
| Turning angle     | 0–5° (increment 1°) |
| Pause/Vibro timer | 0–5 sec             |

### General specifications:

|                                   |  |
|-----------------------------------|--|
| General timer of device operation | 1 min–24 hrs<br>(increment 1 min)            |
| Maximum load                      | 0.5 kg                                       |
| Overall dimensions (W × D × H)    | 365 × 195 × 155 mm                           |
| Weight, not more                  | 1.8 kg                                       |
| Input current/power consumption   | 12V, 660 mA / 8 W                            |
| External power supply             | Input AC 100-240 V 50/60Hz;<br>Output DC 12V |

### Catalogue number:

|                                      |               |
|--------------------------------------|---------------|
| Multi Bio RS-24 with platform PRS-26 | MA-010117-AAG |
| PRS-26                               | MA-010117-GK  |
| PRS-5/12                             | MA-010117-HK  |
| PRS-10                               | MA-010117-IK  |
| PRSC-22                              | MA-010117-LK  |
| PRSC-10                              | MA-010117-JK  |
| PRS-1DP                              | MA-010149-DK  |



**Multi-rotation**

Multi-rotator provides 3 motion types:

- 1 Vertical motion
- 2 Reciprocal motion
- 3 Vibro

Multi-Rotator **Multi RS-60** performs several motion types in one module. Microprocessor control allows performing not only **1 Vertical rotation** of the platform, but also **2 Reciprocal rotation** as well as **3 Vibration**. These three motion types can be performed separately, pairwise and in cycles, periodically repeating the sequence of three motion types. Multi-rotation option of Maikoarray substantially expands possibilities and enhances efficiency of sample preparation for the examined materials and allows adjusting the mixing procedure according to individual tasks.

Multi-Rotator can be used for variety of applications in modern life science laboratories: for hybridization reactions, cell growing, soft extraction and homogenisation of biological components in solutions, as well as for reactions of binding and washing of magnetic particles.

### 1 Vertical rotation:

|                        |                             |
|------------------------|-----------------------------|
| Speed range            | 1–100 rpm (increment 1 rpm) |
| Vertical rotation      | 360°                        |
| Timer with sound alarm | 0–250 sec                   |

### 2 Reciprocal rotation:

|                        |                             |
|------------------------|-----------------------------|
| Speed range            | 1–100 rpm (increment 1 rpm) |
| Turning angle          | 1–90° (increment 1°)        |
| Timer with sound alarm | 0–250 sec                   |

### 3 Vibro rotation:

|                   |                     |
|-------------------|---------------------|
| Turning angle     | 0–5° (increment 1°) |
| Pause/Vibro timer | 0–5 sec             |

### General Specifications:

|                                   |  |
|-----------------------------------|--|
| General timer of device operation | 1 min–24 hrs<br>(increment 1 min)            |
| Maximum load                      | 0.8 kg                                       |
| Overall dimensions (W × D × H)    | 430 × 230 × 230 mm                           |
| Weight, not more                  | 3.8 kg                                       |
| Input current/power consumption   | 24V, 750 mA / 18 W                           |
| External power supply             | Input AC 100-240 V 50/60Hz;<br>Output DC 24V |

### Multi RS-60 with standard platform PRS-48



### Catalogue number:

|   |               |
|---|---------------|
| <b>Multi RS-60 with platform PRS-48</b> | MA-010118-AAI |
| <b>PRS-48</b>                           | MA-010118-CK  |
| <b>PRS-8/22</b>                         | MA-010118-AK  |
| <b>PRS-14</b>                           | MA-010118-BK  |

### Platforms description:

| Platform              | Capacity   | Tube Volume            | Tube Diameter      | Cat. number  |
|-----------------------|--|------------------------|--------------------|--------------|
| 1 PRS-26 (standard)   | 26   | 1.5–15 ml              | up to 15 mm        | MA-010117-GK |
| 2 PRS-5/12 (optional) | 5 and 12   | up to 50 and 1.5–15 ml | up to 30 and 15 mm | MA-010117-HK |
| 3 PRS-10 (optional)   | 10   | up to 50 ml            | up to 30 mm        | MA-010117-IK |
| 4 PRSC-22 (optional)  | 22   | up to 15 ml            | up to 15 mm        | MA-010117-LK |
| 5 RSC-10 (optional)   | 10   | up to 50 ml            | up to 30 mm        | MA-010117-JK |
| 6 PRS-1DP (optional)  | Platform for microplates and racks for tall tubes 0.5 and 1 ml (e.g. Thermo 3741MTX, 3742MTX, 3744MTX) |                        |                    | MA-010149-DK |

1 PRS-26



2 PRS-5/12



3 PRS-10



4 PRSC-22



5 PRSC-10



6 PRS-1DP



Clamps on PRSC-10



PRS — series platforms are equipped with universal rubber clamps for different size tube fixation;

PRSC — series platforms have metal clamps able to hold heavier solutions (e.g. soil, sand).

## Platforms for Multi RS-60

### Platforms description:

| Platform              | Capacity | Tube Volume            | Tube Diameter      | Cat. number  |
|-----------------------|----------|------------------------|--------------------|--------------|
| 1 PRS-48 (standard)   | 48       | 1.5 – 15 ml            | up to 15 mm        | MA-010118-CK |
| 2 PRS-8/22 (optional) | 8 and 22 | up to 50 and 1.5–15 ml | up to 30 and 15 mm | MA-010118-AK |
| 3 PRS-14 (optional)   | 14       | up to 50 ml            | up to 30 mm        | MA-010118-BK |

1 PRS-48

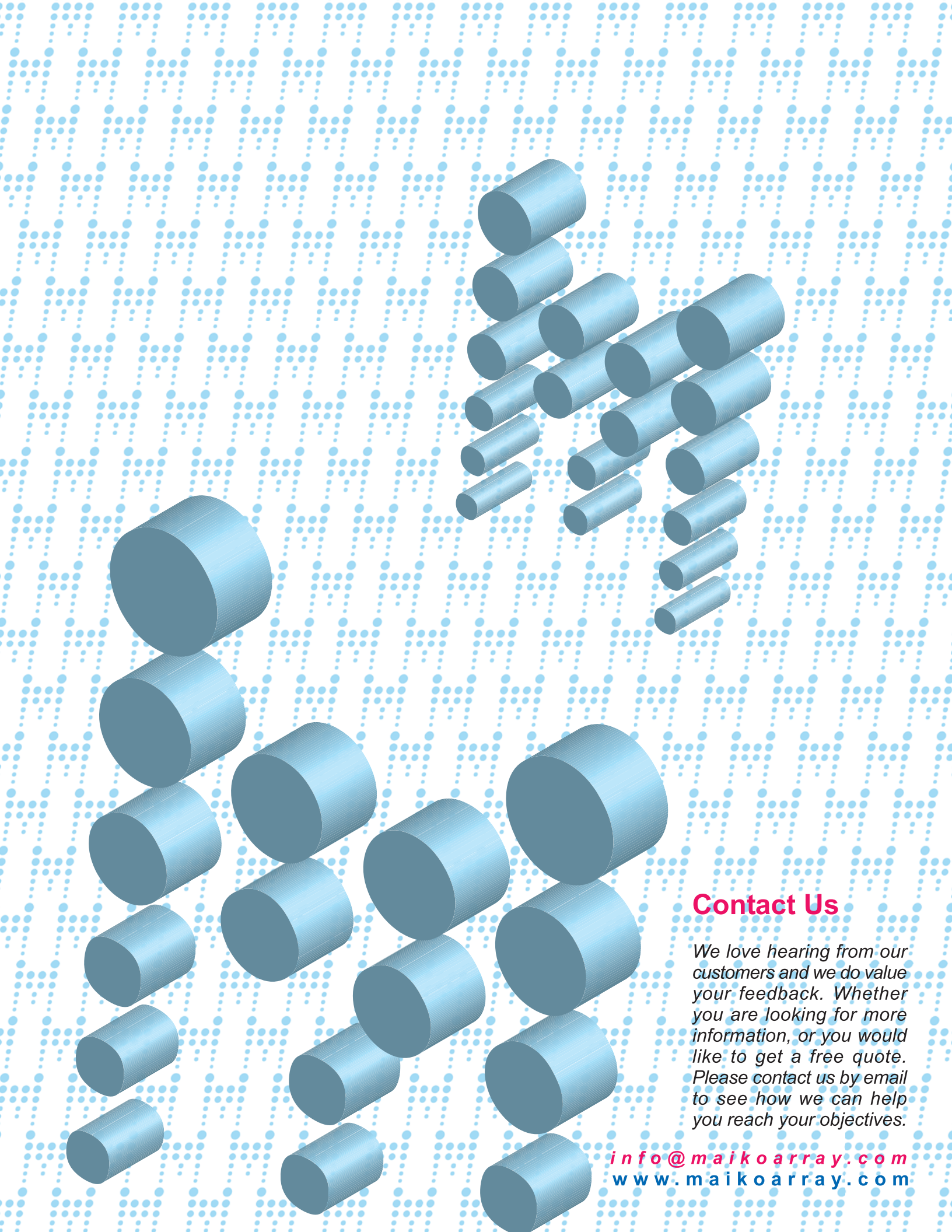


2 PRS-8/22



3 PRS-14





## Contact Us

*We love hearing from our customers and we do value your feedback. Whether you are looking for more information, or you would like to get a free quote. Please contact us by email to see how we can help you reach your objectives.*

*[info@maikoarray.com](mailto:info@maikoarray.com)  
[www.maikoarray.com](http://www.maikoarray.com)*