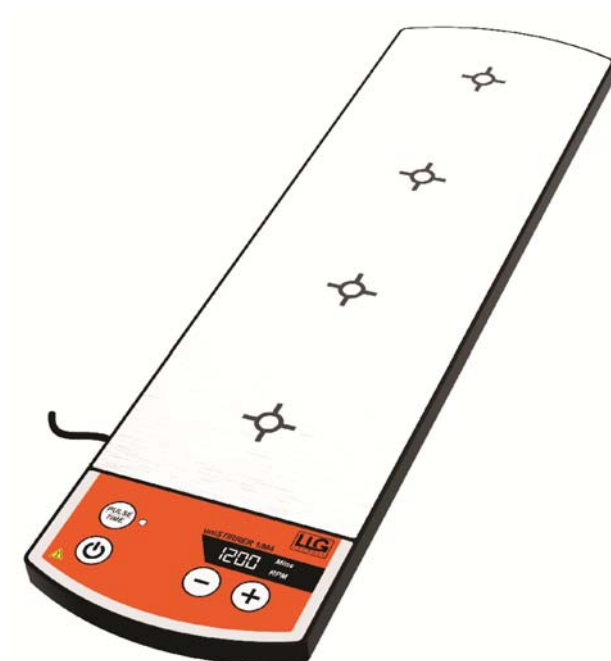




LLG-uniSTIRRER 1M4 User Manual

Part number 6.263 425



CONTENTS

1. Product Description	1
2. Intended Use	1
3. Features	1
4. Accessories	2
5. Technical Specification	2
6. Safety Instructions.....	3
7. Installation & Operation	4
8. Warranty Statement.....	11
9. Product Disposal	12

1. PRODUCT DESCRIPTION

Thank you very much for purchasing the four position electromagnetic stirrer LLG-uni*STIRRER* 1/M4.

This stirrer is designed to give synchronous stirring. Modern magnetic coil technology provides noiseless and consistent stirring. It provides high IP protection class (IP 65) with no moving parts attached to it. Setting of speed and time with digital display showing real time speed. For better mixing, pulse mode is provided in which stirring bar can rotate clockwise & anti-clockwise for every 30 seconds

2. INTENDED USE

This multi position electromagnetic stirrer is designed for for mixing liquids.

3. FEATURES

1. Four stirring positions with synchronous & consistent stirring.
2. Flat surface with slim profile
3. Pulse function of 30 seconds for better mixing.
4. Variable Speed setting from 15 to 1200 RPM
5. Variable time setting from 1 to 99 minutes & continuous mode
6. Digital display for accurate setting of speed & time
7. Anti-skid pads which provides stability during operation.
8. Water spill resistant designed as per IP 65 Standard
9. Wear-free drive with no moving parts
10. Simple control panel for convenient & user friendly interface

4. ACCESSORIES

Set of four Stir bars (PTFE coated, 25 X 8mm high strength stir bar)

5. TECHNICAL SPECIFICATIONS

Name	uniSTIRRER 1/M4
Part number	6.263 425
Number of stirring positions	4
Max. stirring volume per position (as H ₂ O)	400 ml at 1200 RPM
Total stirring volume	4 x 400 ml
Speed range	15 - 1200 rpm
Time range	1 to 99 mins
Auto direction change/Pulse Mode	Yes
Auto direction change time interval	30 seconds
Digital Display	Yes
Recommended stirring Bar Length	25 mm
Set-up plate material	Stainless Steel
Set-up Dimensions (L x W)	385 x 122 mm
Distance Between two stirring points	95 mm
Dimensions (L x W x H)	457 x 126 x 13.4 mm
Weight	1.9 kg
permissible ambient temperature	5 - 40 °C
Protection class according to DIN EN 60529	IP 65
Input Voltage	100 - 240 VAC, 50 / 60 Hz
Output Voltage	9 VDC
Power Consumption	13 W

6. SAFETY INSTRUCTIONS

In order to use this equipment properly & safely, every user must read the user manual & observe safety instructions.

1. Do not place any steel or magnetic material on the top surface except beaker or flask with the recommended magnetic stirring bar. Doing this can affect the magnetism of the device.
2. Place device on a flat, stable, clean, non-slippery and fire-proof surface.
3. The top surface must be clean and intact. Use soft mild cloth to clean.
4. Do not try to stir liquid more than 400 ml per stirring position. It may lead to improper mixing.
5. Wear your personal protective equipment in accordance with the hazardous category of the media to be processed.
6. Do not lift or hold the device at the cable. Properly lift the device with both hands from the base while shifting or installing at another location.
7. Do not use damaged beaker, flask, stirring bar or any other component for operation. It may affect the efficiency of the device.
8. Reduce the speed:
 - if the medium splashes out of the vessel because of high speed
 - if the stirrer is not running smoothly
 - if the vessel moves on the base plate
9. Wear protective gloves while cleaning the device.
10. Process pathogenic materials only in closed vessel under a suitable extractor hood. Do not operate the device in any explosive atmosphere with hazardous substance or under water.

11. The temperature of the stirring media in the beaker and the beaker itself should not be more than 45 °C
12. In case of power failure or mechanical interruption, stirrer will not start automatically after restoration of power or mechanical parts. Due care should be taken.

7. INSTALLATION AND OPERATION

This electromagnetic stirrer is provided in a stiff packed box. Open the box, remove the packaging and gently place the device on a firm and levelled surface. Take care while unpacking and gently remove all the accessories. The user manual should be kept with the device for easy access. Please keep all packaging in safe storage for at least three years for warranty purpose.

Below table shows the function of user interface buttons.

Buttons	Buttons Name	Functions
	ON/OFF Button	Press this to turn ON and turn OFF the unit.
	Pulse & Time Mode button	Single press button to activate pulse mode. Long press button to activate time mode, "t" will be displayed.
	Increment Button	Press this to increase speed/time value.
	Decrement Button	Press this to decrease speed/time value

1. Connect the AC power adaptor to the mains.
2. Fill the beaker or vessel with the medium or liquids to be processed
3. Place the magnetic stirring bar in the beaker, flask or vessel.
4. Place the vessel or beaker on the centre of the base plate.
5. Turn ON the electromagnetic stirrer by pressing ON/OFF button.
6. Set the speed at which the medium or liquids to be processed. The minimum speed is 15 RPM and the maximum speed is 1200 RPM.
7. Set the Time if it requires. Minimum time is 1 minute & Maximum time is 99 minutes. By default, time is always continuous.

SPEED SETTING

- Press increment (+) & decrement (-) button to modify & set the desired speed value.
- Single press increment (+) OR decrement (-) button to increase or decrease the speed value by 50 RPM on each press.
- Continuous press increment (+) OR decrement (-) button to increase or decrease the speed value at a faster pace.
- Speed value is seen in the digital display and get set after 3 blinks.
- At any point of time, user can modify the speed using increment (+) OR decrement (-) button.
- On every restart, the stirrer will start with the last run speed.

TIME SETTING

The default timer is set as continuous mode when stirrer starts for the first time.

In order to set time -

- Long press the "PULSE/TIME" button to activate the Time mode. By default, the timer will be continuous and will show ' ' in display.
- Once activated, single press "+" or "-" to increase or decrease time value by 1 minute on each press.
- Once activated, continue to press "+" or "-" to increase or decrease time value at faster pace.
- After modifying the display blinks 3 times, then the set time gets locked.
- Speed can be modified at any point of time. Speed and time will display alternatively after speed has reached the set RPM.
- When timer reaches zero (0), the stirring stops. The display will show "t 00" & "000" alternatively indicating time for stirring is over.
- After any stirring operation, press any button except the power button to start the stirring operation with the last run speed and time.
- Press the ON/OFF button again to stop the ongoing operation as well as to switch OFF the electromagnetic stirrer.
- After every restart (ON/OFF), stirrer will start operating at the last run speed and continuous time.

Note: Timer will be set to default (continuous) once the stirrer restarts.

PULSE MODE

Press "Pulse" to start pulse mode operation. In pulse mode, the stirring direction will change alternatively from clockwise to counter-clockwise direction in every 30 seconds.

To activate Pulse mode, first set the required speed & then single press the pulse button to start the stirring process in pulse mode. LED adjacent to pulse button will blink to indicate activation of pulse mode.

Pulse mode can also be time bound. For time bound, set speed and also time, then single press the pulse button to start stirring in Pulse mode.

Pulse stirring mode ends when time reaches to zero '0'.

NOTE: *In case of spillage, first turn OFF and turn ON again. If spillage still occurs, then reduce the speed for efficient operation.*

8. WARRANTY REPLACEMENT

This product is warranted to be free from defects in material and workmanship for a period of three (3) years from date of purchase. Your product will be duly repaired or replaced after prompt notification in compliance with the following conditions:

This warranty is valid only if the product is used for its intended purpose and within the guidelines specified in this instruction manual. This warranty does not cover damage caused by accident, neglect, misuse, improper service, natural forces or other causes not arising from defects in original material or workmanship. This warranty does not cover any incidental or consequential damages, commercial loss or any other damages from the use of this product.

The warranty does not cover damage to paint or finish and defects or damages caused by physical and chemical abuse or normal wear and tear.

The warranty is invalidated by any non-factory modification, which will immediately terminate all liabilities on us for the products or damages caused by its use. The buyer and its customer shall be responsible for the product or use of products as well as any supervision required for safety. If requested the products must be returned to the distributor in well packed and insured manner and all shipping charges must be paid.

9. PRODUCT DISPOSAL

In case the product is to be disposed of, the relevant legal regulations are to be observed.

Information on the disposal of electrical and electronic devices in the European Community.

The disposal of electrical devices is regulated within the European Community by national regulations based on the European Directive 2012/19/EU on waste electrical and electronic equipment (WEEE). According to these regulations, any devices supplied after 13.06.05 in the business to business sphere, to which this product is assigned, may no longer be disposed of in municipal or domestic waste. They are marked with the following symbol to indicate this.



As disposal regulations within the EU may vary from country to country, please contact your supplier if necessary.



Lab Logistics Group GmbH

Am Hambuch 1

D-53340 Meckenheim

Tel. +49 2225 9211-0

Fax + 49 2225 9211-11

www.llg-labware.com

info@llg-labware.com

Dateiname: LLG-uniSTIRRER 1-M4 - Usermanual_UK.DOC
Verzeichnis: M:\LLG Labware\5. Labware-Produkte\LLG_uniOVEN
150\Manual\Original
Vorlage: C:\Users\Schneidler\AppData\Roaming\Microsoft\Templates\Normal.dot
m
Titel: PRODUCT DESCRIPTION
Thema:
Autor: 朱熠锶
Stichwörter:
Kommentar:
Erstelldatum: 14.06.2016 14:53:00
Änderung Nummer: 15
Letztes Speicherdatum: 11.07.2016 10:03:00
Zuletzt gespeichert von: Christiane Schneidler
Letztes Druckdatum: 11.07.2016 10:04:00
Nach letztem vollständigen Druck
Anzahl Seiten: 13
Anzahl Wörter: 1.379 (ca.)
Anzahl Zeichen: 8.693 (ca.)