

# Instruction Manual Analog Vortex Mixer with Fixed Cup Head



# TABLE OF CONTENTS

									_
Package Contents								1	
Warranty								1	
Installation								2	
Maintenance & Servicing								2	
Environmental Conditions								2	
Safety Instructions								2	
Standards & Regulations								3	,
Specifications								3	,
Introduction								4	
Operating Instructions								4	

### PACKAGE CONTENTS

Analog Vortex Mixer 72" (183cm) power cord Instruction manual

#### WARRANTY

Manufacturer warrants this product to be free from defects in material and workmanship when used under normal conditions for two (2) years. Register your equipment or instrument online at www.vwrsp.com/warranty for US residents or www.vwrcanlab. com/warranty for Canadian residents. For your reference, make a note of the serial number, date of purchase and supplier here.

Serial Number:	
Date of Purchase:	
Supplier:	

#### INSTALLATION

Upon receiving the VWR Vortex Mixer, check to ensure that no damage has occurred during shipment. It is important that any damage that occurred in transport is detected at the time of unpacking. If you do find such damage the carrier must be notified immediately.

After unpacking, place the Vortex Mixer on a level bench or table, away from explosive vapors. Ensure that the surface on which the unit is placed will withstand typical heat produced by the unit. Always place the unit on a sturdy work surface.

The Vortex Mixer is supplied with a power cord that should be plugged into a properly grounded outlet. If the supplied power cord does not meet your needs, please use an approved power cord that suits local codes and electric supply. Replacement of the plug must be made by a qualified electrician.

# MAINTENANCE & SERVICING

The Vortex Mixer is built for long, trouble-free, dependable service. No lubrication or other technical user maintenance is required. The unit should be given the care normally required for any electrical appliance. Avoid wetting or unnecessary exposure to fumes. Spills should be removed promptly. **DO NOT** use a cleaning agent or solvent on the front panel which is abrasive or harmful to plastics, nor one which is flammable. Always ensure the power is disconnected from the unit prior to any cleaning. If the unit ever requires service, contact your VWR representative.

#### **ENVIRONMENTAL CONDITIONS**

Operating Conditions: Indoor use only.

Temperature: 4 to 40°C (39.2 to 104°F)

Humidity: 20% to 85% relative humidity, non-condensing Altitude: 0 to 6,562 ft. (2000 M) above sea level

Non-Operating Storage:

Temperature: -20 to 65°C (-4 to 149°F)

Humidity: 20% to 85% relative humidity, non-condensing

Installation Category II and Pollution Degree 2 in accordance with IEC 664.

#### SAFETY INSTRUCTIONS

Please read the entire instruction manual before operating the Vortex Mixer.



**WARNING!** DO NOT use the Vortex Mixer in a hazardous atmosphere or with hazardous materials for which the unit was not designed. Also, the user should be aware that the protection provided by the equipment may be impaired if used with accessories not provided or recommended by the manufacturer, or used in a manner not specified by the manufacturer.

Always operate unit on a level surface for best performance and maximum safety.

Cup head is permanently attached to the unit. **DO NOT** try to remove or permanent damage will occur.



**CAUTION!** To avoid electrical shock, completely cut off power to the unit by disconnecting the power cord from the wall outlet. Disconnect unit from the power supply prior to maintenance and servicing.

Spills should be removed promptly. **DO NOT** immerse the unit for cleaning.

**DO NOT** operate the unit if it shows signs of electrical or mechanical damage.



Earth Ground - Protective Conductor Terminal

Alternating Current

#### STANDARDS & REGULATIONS

Henry Troemner LLC hereby declares under it's sole responsibility that the construction of this product conforms in accordance with the following standards:

Safety standards:

IEC 61010-1 Safety requirements for electrical equipment for

measurement, control and laboratory use. Part I:

General Requirements.

IEC 61010-2-051 Part II: Particular requirements for laboratory

equipment for mixing and stirring.

UL Std. No. 61010-1

**EMC standards:** 

 IEC45501
 IEC6100-3-2/3-3

 IEC61000-4-2
 IEC61000-4-3

 IEC61000-4-4
 IEC61000-4-5

 IEC61000-4-6
 IEC61000-4-11

EN55022A

Associated EU guidelines:

EMC directive 2004/108/EC LVD directive 2006/95/EC

RoHS directive 2011/65/EU

## ANALOG VORTEXER MIXER SPECIFICATIONS

**Overall dimensions (L x W x H):** 7.75 x 6 x 5.5"

(19.7 x 15.2 x 14cm)

**Electrical (50/60 Hz):** 120V, 1.2 amps, 150 watts

Speed range\*: 300 to 3200rpm

**Orbit:** 0.194" (4.9mm)

**Duty rating:** intermittent duty

Controls: auto/off/on rocker switch, speed knob: variable 1 to 10 dial marks

Speed knob. Variable 1 to 10 diai marks

**Ship weight:** 11.7lbs (5.3kg)

#### VORTEX MIXER INTRODUCTION

Your Vortex Mixer is ready for most one-handed applications. The Vortex Mixer operates by mixing tubes just prior to testing.

#### **OPERATING TIPS**

These units are not intended for continuous use over extended periods of time. A built-in temperature sensor will prevent the unit from overheating by shutting the motor down. If this occurs, allow the motor to cool down and the unit will be able to resume normal operation. Decrease the duration of the time unit is used between rest periods.

**NOTE:** The cup head is permanently attached to the unit. **DO NOT** try to remove or permanent damage will occur.

#### Analog Vortex Mixer Operating Instructions

- Make sure the 3-way rocker switch is in the center, off position. Plug the power cord into a properly grounded outlet.
- 2. For continuous operation, push the rocker switch to the right, on position. For intermittent/touch operation, push the rocker switch to the left, auto position.
- 3. In either case, turn the speed knob to 1. In the on position, you will see the head in motion immediately. In the auto position, the vessel you are using must be pushed down on the head attachment to achieve motion. To get the desired mix, vary the speed, using the speed knob, and/or vary the angle of contact and pressure against the head.
- When finished with either continuous or intermittent operation, return rocker switch to the center, off position.
- 5. The intermittent, auto mode is intended for short mixing times of one (1) minute or less at full speed. A rest period of two (2) minutes is recommended to minimize the possibility of overheating the motor. The unit can become warm to the touch with constant use. There is nothing wrong with it. At high performance settings the motor (UL recognized component) simply puts out more heat.
- To completely cut off power to the unit, disconnect the power cord from the wall outlet.

MANUFACTURED BY:

#### TROEMNER LLC

201 Wolf Drive • Thorofare, NJ 08086-0087 Phone: 856-686-1600 • Fax: 856-686-1601 • E-mail: troemner@troemner.com

www.troemner.com