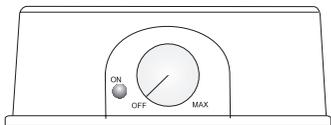
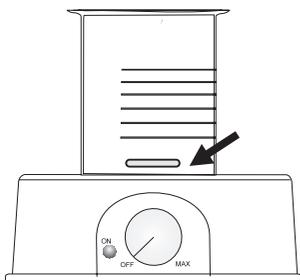


## Operational Guide

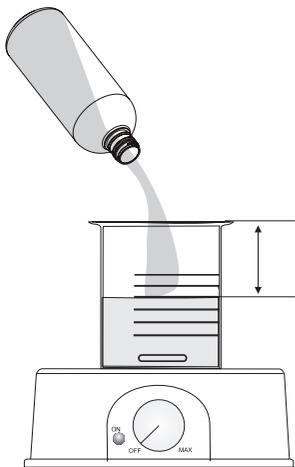
- Make sure that the SPEED knob is in the OFF position.



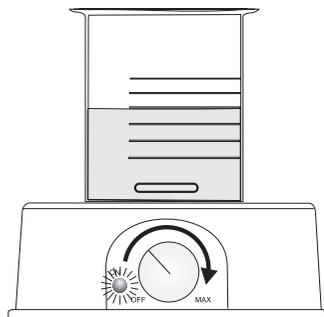
- Place a beaker or glass container on the top of the stirrer and place the stir bar at the center of the beaker base.



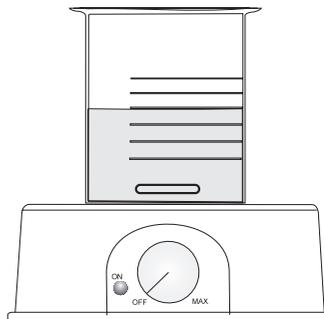
- Pour the liquids to be mixed into the beaker. Do not fill the brim and leave sufficient space to prevent spillage during stirring.



- Connect the power cord to the mains.
- Adjust the SPEED knob slowly until the required stirring speed is achieved.



- Allow sufficient time for the mixing operation to attain uniform rotational flow.
- After stirring is complete, turn the SPEED knob to OFF position.



- If no further stirring is required, disconnect the power supply.

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## Recommendations for Users

Before using these products, make sure that they are entirely suitable for the environment in which they are used. Any variation introduced by the user to the supplied equipment may degrade the instrument's performance.

## Accessories

Code	Description
HI731319	Magnetic micro stir bar (10 pcs.)

## Warranty

All Hanna Instruments stirrers are warranted for two years against defects in workmanship and materials when used for their intended purpose and maintained according to the instructions. Damages due to accident, misuse, tampering or lack of prescribed maintenance are not covered. This warranty is limited to repair or replacement free of charge. If service is required, contact your local Hanna Instruments Office. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. If the repair is not covered by the warranty, you will be notified of the charge for repair or replacement. If the instrument is to be returned to Hanna Instruments, obtain a Return Goods Authorization (RGA) from the Customer Service Department first and then send it with shipment cost prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

## INSTRUCTION MANUAL

# HI180 Compact Magnetic Mini-Stirrers



## Thank You

Thank you for choosing a Hanna Instruments product. Please read this instruction manual carefully before using the instrument.

For more information about Hanna Instruments and our products, visit [www.hannainst.com](http://www.hannainst.com). For technical support, contact your local Hanna Instruments Office or e-mail us at [tech@hannainst.com](mailto:tech@hannainst.com)

Find your local Hanna Instruments Office at [www.hannainst.com](http://www.hannainst.com)

## Preliminary Examination

Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipment. If noticeable damage is evident, contact your local Hanna Instruments Office.

Each meter is supplied with:

- micro stir bar (L 25 x dia 7 mm)
- instruction manual

*Note: Save all packing material until you are sure that the instrument functions correctly. All defective items must be returned in the original packing together with the supplied accessories.*

## General Description

**HI180** are compact and lightweight magnetic stirrers. Lack of laboratory bench space is no longer a concern. They incorporate electronic controls that allow the user to regulate the speed with greater precision.

In addition to speed control, the **Speedsafe™** system assures that the maximum speed (1000 rpm) is never exceeded.

Several **HI180** stirrers can be placed on the laboratory bench and the colors will help in recognizing the different samples.

Their plastic cover will resist the harmful effects of any accidentally spilled chemical.

**HI180** stirrers are available in two voltage versions (220/240 Vac and 110/115 Vac), and in eleven colors as follows:

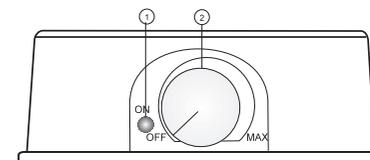
MODEL	COLOR
HI180	black
HI180A	yellow
HI180C	glacier blue
HI180E	green
HI180F	blue
HI180I	ivory
HI180J	charcoal
HI180K	orange
HI180L	lavender
HI180M	moss green
HI180W	arctic white

## Specifications

Max. Stirring Capacity	1 Liter (0.26 gallons)
Min. Speed Range	100 rpm
Max. Speed Range	1000 rpm
Power Supply	
HI180-1	110/115 Vac, 50/60 Hz
HI180-2	220/240 Vac, 50/60 Hz
Installation Category	II
Cover Material	ABS plastic
Environment	0 to 50 °C (32 to 122 °F); RH max 95%
Dimensions	137 mm (dia) x 51 mm (h) (5.39 x 2")
Weight	640 g (1.4 lbs.)

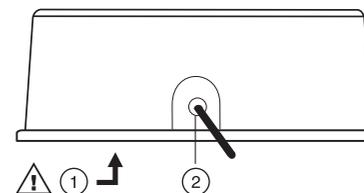
## Functional Description

### FRONT PANEL



1. Power indicator (LED lights up when the stirrer is powered).
2. ON/OFF/Speed knob - to turn the stirrer ON and OFF and set the stirring speed (continuously variable up to the maximum).

### REAR PANEL



1. Fuse holder for 400 mA/250 V fuse
2. AC power cord

 Unplug the stirrer from the power supply before replacing the fuse.