

# VORTEX-GENIE® 2T TIMED MIXER

## OPERATING INSTRUCTIONS

Models SI-T236 through SI-T296



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The VORTEX-GENIE® 2T Mixer is an enhanced version of the **ORIGINAL** VORTEX-GENIE® Mixer produced by Scientific Industries. VORTEX-GENIE mixers are the "Gold Standard" for laboratory mixers. The quality and reliability, that you have come to know so well, are characteristics that are, by design, an integral part of all GENIE™ products.

## APPLICATIONS

The 3-inch Platform accepts single or multiple test tubes, beakers and various flasks. The removable cover, made of thermoplastic rubber, is highly impervious to chemicals. It is, however, recommended that spills are blotted quickly. Do not attempt to use the 3-inch Platform without the rubber cover.

The Pop-off Cup can accommodate tubes of virtually any size or shape from micro tubes to those up to 40mm in diameter and 200mm in length. In most instances, tubes without caps may be mixed with proper speed control. Tubes must be capped when potential aerosols may be hazardous.

## Catalog Numbers:

OK-0500-902 3-inch Platform with Rubber Cover  
OK-0500-901 3-inch Platform without Rubber Cover  
580-2013-00 Rubber Cover for 3-inch Platform

## OPERATING INSTRUCTIONS

We recommend that you retain your original packaging for 90 days in case you need to return the product for any reason to your distributor or Scientific Industries.

- 1.0 - Plug the line cord into a properly grounded electrical outlet. **(120 VAC for the T236 model; 230 VAC for the T246 model; 100 VAC for the T286 model)**
- 2.0 - The VORTEX-GENIE 2T Mixer has the following modes of operation:
  - 2.1 - "TT" (*TIMED TOUCH - 1 to 60 seconds*)  
For procedures that require **short duration vortex** mixing from 1 to 60 seconds. Or, for procedures that require **accurate and repetitive vortex mixing sequences** of 1 to 60 seconds each.

In the "TT" operating mode, place the toggle switch in the TOUCH position and set the 1 to 60 second **timer** (gray knob with white reference line) to the desired mixing time on the gray numbered scale. Next, set the **speed control** (black pointer shaped knob) to any position between 3 and 10 on the black numbered scale before initiating the "TT" operating mode. A setting of 3 is least vigorous mixing and 10 is the most vigorous mixing. When you touch a tube or other vessel to the 3-inch Platform or Pop-off Cup, the mixer will start and run for 1 - 60 seconds, depending on the timer setting. The mixer will automatically turn off at the end of the 1 - 60 second cycle. Releasing the pressure on the Platform or Cup and then re-applying the pressure will initiate another 1 - 60 second cycle. The mixing cycles will be precisely timed and you may initiate as many mixing cycles as you wish.

- 2.2 - "CT" (*CONTINUOUS TOUCH*)

The "CT" mode is used when you desire to operate the VORTEX-GENIE 2T so that vortex mixing starts and runs continuously, without interruption, when you touch the vessel to either the 3-inch Platform, or to the Pop-off Cup. To set the "CT" operating mode, place the toggle switch in the TOUCH position and turn the gray



timer knob completely counter-clockwise until it "clicks" into the continuous (NO TIMER) position. Set the speed control knob. (see 2.1 on previous page)

- 2.3 - "FT" (*HANDS FREE TIMED - 1 to 60 minutes*)

The "FT" mode allows for unattended operation that is timed from 1 to 60 minutes. In this mode, you may use any of the accessory attachments that are available for the VORTEX-GENIE® 2T Mixer. **Review instruction No. 3.0 before attempting to change attachments.**

To initiate the "FT" operating mode, place the toggle switch in the center (unmarked) position. With the desired accessory attachment installed and with the sample tubes or vessels in place, set the 1 to 60 minute timer (gray knob and gray numbered scale) to the desired run time. *With the toggle switch in the center position, the VORTEX-GENIE 2T is OFF until the toggle switch is depressed to the START/STOP position, held for a second and then released. This will start the mixing action of the "GENIE™".* The mixer will run until the set time has elapsed. If for any reason you wish to stop the mixing action before the set time has elapsed, simply depress the toggle switch to the START/STOP position for a second time and release. The mixer will stop. Depressing the toggle switch a third time will initiate a completely new timed cycle.

- 2.4 - "FC" (*HANDS FREE CONTINUOUS*)

The "FC" mode allows for unattended operation that will continue indefinitely until you stop the run by depressing the toggle switch. In this mode, you may also use any of the accessory attachments available for the VORTEX-GENIE 2T Mixer.

To initiate the "FC" mode, turn the gray timer knob completely counter-clockwise until it "clicks" into the continuous (NO TIMER) position. Next, depress the toggle switch to the START/STOP position for one second and then release. The VORTEX-GENIE 2T Mixer will start and continue to run, unattended, until you once again depress the toggle switch to the START/STOP position and hold it for a second before releasing. If you wish to restart the mixer once again, simply depress the toggle switch for a second and release.

**Note: The speed control switch should be set between positions 3 and 10 to enable the mixing action to start. After the action has started, you may, if desired, reduce the speed below position 3 for the duration of the run. Before re-starting the mixer, re-set the speed control to a setting higher than position 3.**

- 3.0 - To change accessory mixing attachments, the following sequence is to be followed explicitly.
  - 3.1 - Turn the power OFF by first placing the toggle switch into the TOUCH position momentarily and then moving the toggle switch to the center (unmarked) position.
  - 3.2 - Grasp the installed attachment and pull straight up until it releases from the shaft. A technique of lifting the attachment with your finger tips while using your knuckles as a fulcrum will give you the leverage to remove the installed component smoothly.
  - 3.3 - Hold the part you wish to install so the "flat" part of the shaft is aligned with the "flat" of the receptacle in the attachment. Alternatively, you may place the attachment on the shaft and turn it until you feel the "flats" aligning.
  - 3.4 - Press attachment firmly downward until it "snaps" into place. The VORTEX-GENIE 2T is now ready to use with the newly installed accessory attachment. Follow instructions 1.0 through 2.4 for proper use of the mixer.

4.0 - With prolonged use, your VORTEX-GENIE® 2T Mixer may become warm to the touch. It **should not get HOT** to the touch. The motor will radiate a certain amount of heat that will be dissipated by the cast zinc housing.

**⚠ CAUTION! Do not lift your VORTEX-GENIE 2T Mixer by its attachment.**  
All attachments, including the Pop-off Cup and the 3-inch Platform are removable. They will pop off easily if you lift them, and snap back on again just as easily by aligning the flats and pressing down firmly.

**⚠ CAUTION! Failure to follow operating instructions can compromise the user's safety.**

### CARE AND HANDLING

Your VORTEX-GENIE 2T Mixer should be given the care normally required for any electrical appliance. Avoid wetting or unnecessary exposure to fumes. The finish can be washed with water (after unplugging) and soap or detergents, using a cloth or sponge. Keep the unit clean by immediately blotting any spills. Replacement parts are available through most laboratory equipment distributors or directly from Scientific Industries. Refer to "Parts Assembly List" and enclosed multi-fold brochure.

**⚠ CAUTION! Unplug from power before cleaning. Do not immerse.**

### SPECIFICATIONS

The Vortex-Genie 2T Mixer is classified as "Installation Category 2"  
Environmental: 0°C - 38°C (32°F-100°F), 95% Humidity max.

MODEL	POWER REQUIRED	AMPS
SI-T236	120V/60Hz	0.65
SI-T246	230V/50Hz	0.5
SI-T286	100V/50-60Hz	1.0

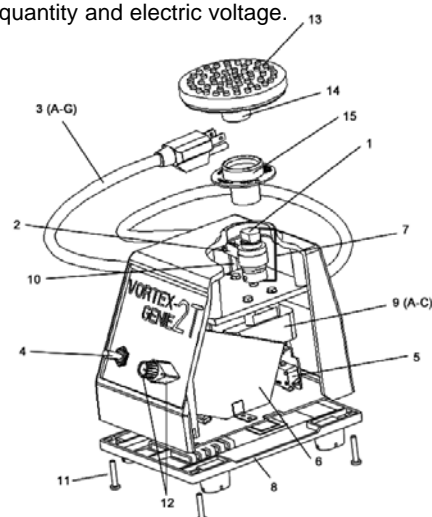


Weight: 4 Kg (8.8 lb) - Zinc casting with shock absorbing feet.  
Base Dimensions: (DxWxH) 165x122x165mm (6.5x4.8x6.5in)

### PARTS ASSEMBLY LIST

**To order parts for the VORTEX-GENIE 2T Mixer:**

Contact your local distributor or visit [www.scientificindustries.com](http://www.scientificindustries.com). Please specify Part No., quantity and electric voltage.



Indicator No.	Part No.	Description
1	OK-0236-902	Bearing Retainer Kit
2	OK-0236-903	Eccentric Clamp
3A	318-0510-02	120V Line Cord
3B	OK-0246-901	230V Line Cord, No Plug
3C	OK-0256-901	230V Line Cord, European Plug
3D	OK-0266-901	230V Line Cord, British Plug
3E	OK-0276-901	230V Line Cord, Swiss Plug
3F	OK-0286-901	100V Line Cord
3G	ECP0021	Australian Plug (only)
4	ESP0008	Switch TOUCH/START/STOP
5	ESP0005	Micro Switch
6	EBP0001	Timer Board 120V, 230V, 100V
7	OK-0236-904	Eccentric with Clamp Assembly
8	PP-0236-408	Bottom Closure with Feet
9A	OK-0236-905	Motor 120V Assembly
9B	OK-0246-915	Motor 230V Assembly
9C	OK-0286-915	Motor 100V Assembly
10	566-0028-00	Spring, Extension, Eccentric
11	SCP0059	Screws, Bottom Closure (4)
12	PP-T236-400	Knobs Set
13	580-2013-00	Rubber Cover for 3-inch Platform
14	OK-0500-901	3-inch Platform
15	146-3011-00	Pop-off Cup