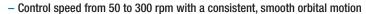
Mini Digital Orbital Shaker

Mix a variety of vessels, quietly



- Position within incubators (non-CO₂), chambers, and refrigerators (up to 60°C)
- Use in continuous shaking or timer mode up to 99 hrs 59 min
- Customize unit for exact laboratory needs with a variety of accessories
- Unit must be ordered with platform, sold separately below



Orbit size	Power		Diverture	Cotolog number	Duine
	VAC	Hz	Plug type	Catalog number	Price
½" (13 mm) dia	100 to 240	50/60	US	GY-04725-14	
72 (13 IIIII) uia	100 t0 240	50/60	Assorted [†]		

[†]Model 04725-15 includes cord set with plugs for China, Europe, and UK.

Platforms (one required)

Description	Catalog number	Price
Universal attachment	GY-04725-76	
Universal platform	GY-04725-77	

Flask Clamps

Flask size	Max number per universal platform	Catalog number	Price
50 mL	16	GY-04725-78	
100 mL	9	GY-04725-79	
250 mL	9	GY-04725-80	
300 mL	9	GY-04725-81	
500 mL	5	GY-04725-82	
1 L	4	GY-04725-83	
2 L	1	<u>GY-04725-84</u>	



Specifications

Speed range: 50 to 300 rpm **Maximum Load:** 8.8 lb (4 kg)

Timer: 1 min to 99 hr, 59 min or continuous Platform dimensions: $9^{13}/6^{\circ}$ x $9^{13}/6^{\circ}$ (25 x 25 cm)

Variable-Speed Digital Orbital Shakers

Get accurate shaking even under heavy loads

- Ideal swivel motion with a maximum shaking weight of 4 lb (2 kg)
- See both speed and time settings on digital display
- Use with almost any type of vessel

Basic Model: Low-profile, quiet shaker offers long service life even under extreme load conditions. Features stepless speed adjustment from 80 to 800 rpm. Operate continuously or in time operating mode (up to 50 minutes). Audio signal sounds when shaker process is complete.

Control Model: Backlit LCD shows speed, time, and operating mode. Activate, deactivate, or set target speed or agitation time with rotary dial. Electronic time switching clock allows for both continuous operation and timed runs up to 9 hours, 59 minutes. End-point positioning feature allows automated robot-controlled sampling. Order platforms and attachments separately below.



Specifications

Speed range: 80 to 800 rpm (adjustable)

Timer range:

Basic model: 5 to 50 min or continuous Control model: 1 to 9 hr 59 min or continuous **Maximum load:** 4.4 lb (2.0 kg) **Platform dimensions (W x D):** 9" x 9" (22.9 x 22.9 cm)

Orbit	Pov	ver	Catalog	Duino
size	VAC	Hz	number	Price
Basic model				
5/32" (4 mm)	115	50/60	GY-04303-02	
5/32" (4 mm)	230	50/60	GY-04303-00	
Control model				
5/32" (4 mm)	115	50/60	GY-04303-06	
5/32" (4 mm)	230	50/60	<u>GY-04303-04</u>	

Platforms (one required)

Description	Catalog number	Price
Universal attachment	GY-04303-50	
Fixing clip attachment	GY-04303-52	
Dish attachment	GY-04303-54	
Test tube support	GY-04303-56	

Flask Clamps

Flask size	Catalog number	Price
25 mL	GY-04303-58	
100 mL	GY-04303-60	
200 mL	GY-04303-62	



Cole-Parmer® Digital Slow-Speed **Orbital Shakers**

Don't pay more for the features you want

- Brushless motor ensures quiet, trouble-free operation

Improve repeatability of test procedures with microprocessor-based control. Digital display tracks preset timed run, continuous run, and rpm settings. Features skid-free rubber platform mat provides a nonslip surface. Continually adjustable speed lets you obtain gentle agitation or vigorous orbital motion. Slow start and stop motion decreases risk of spills.

What's included: 6-ft (1.8-m) cord with US standard plug.

CE	2
7	Constitution of the consti

Orbit	Pov	wer	Catalog	Price		
size	VAC	VAC Hz		FIICE		
Shakers with 12"W x 12"D platform (30.5 x 30.5 cm)						
3/4" (19 mm) dia	110 to 240	50	GY-51820-30			
Shakers with 16"W x	16"D platform (4	0.6 x 40.6 cm)				
3/4" (19 mm) dia	110 to 240	50	GY-51820-40			
Shakers with 20"W x 20"D platform (50.8 x 50.8 cm)						
3/4" (19 mm) dia	110 to 240	50	GY-51820-50			



Cole-Parmer®

Specifications

Speed range: 50 to 250 rpm Maximum load: 5.5 lb (2.5 kg) Timer range: 0 to 99 hours

Open Air Platform Shakers

Configure to your exact needs

- Will not vibrate even under full or unbalanced loads

Analog Shakers feature a DC motor and variable-speed control from 40 to 400 rpm, controlled by rotary dial. Integrated tachometer monitors and displays speed in rpm to guarantee an accurate setting. Operate shaker in continuous mode or set timer from 1 to 60 minutes.

Digital Shakers feature variable speed control from 15 to 500 rpm and continuous and timed runs from 0.1 to 999 hours. Eliminate splashing of vessel contents with soft-start feature. Displayed time counts up during continuous operation and counts down during timed runs. Shaker shuts down and audible/visual alarms signal if unit operates ±10% of set point speed. RS-232 interface allows remote monitoring of speed and time. Order platforms and clamps separately.

What's included: 120 VAC models have an 8-ft cord with US standard plug; 240 VAC models have an 8-ft (2.4-m) cord with European plug.



Specifications -

Speed range

Analog shakers: 40 to 400 rpm Digital shakers: 15 to 500 rpm with ±1 rpm accuracy

Maximum load

Small shakers: 35 lb (15.9 kg) Large shakers: 50 lb (22.7 kg)

Orbit size	Power		Catalog	Price		
OI DIL SIZE	VAC	Hz	number	FIICE		
Analog shakers, small						
3/.!! (10 mm) dia	120	50/60	GY-51706-00			
3/4" (19 mm) dia	240	50/60	GY-51706-05			
Analog shakers, large						
1" (05 mm) dia	120	50/60	GY-51706-10			
1" (25 mm) dia	240	50/60	GY-51706-15			
Digital shakers, small	Digital shakers, small					
3/.!! (10 mm) dia	120	50/60	GY-51706-20			
3/4" (19 mm) dia	240	50/60	GY-51706-25			



Universal Platforms

Size	Catalog number	Price
For small shakers		
11" x 13" (27.9 x 33.0 cm)	<u>GY-51706-50</u>	
18" x 18" (45.7 x 45.7 cm)	<u>GY-51706-52</u>	
18" x 24" (45.7 x 61.0 cm)	<u>GY-51706-54</u>	
For large shakers		
36" x 24" (91.4 x 61.0 cm)	GY-51706-62	

Clamps for Universal Platforms

	Maxim	ium numbe	r of clamps	per platfor	m size		
Flask	11" x 13"	18" x 18"	18" x 24"	30" x 18"	36" x 24"	Catalog	Price
size	(27.9 x	(45.7 x	(45.7 x	(76.2 x	(91.4 x	number	1 1100
	33.0 cm)	45.7 cm)	61.0 cm)	45.7 cm)	61.0 cm)		
For microplate/deep-well plates							
_	5	10	15	18	29	<u>GY-51706-70</u>	
For Erle	nmeyer fla	sks					
10 mL	60	113	157	112	160	GY-51706-72	
25 mL	60	64	80	112	160	GY-51706-74	
50 mL	30	32	40	112	160	GY-51706-76	
125 mL	13	32	40	44	80	GY-51706-78	
250 mL	9	16	23	24	40	GY-51706-80	
500 mL	6	16	20	18	40	GY-51706-84	
1 L	4	9	10	12	21	GY-51706-86	
2 L	1	6	5	6	11	GY-51706-88	

Dual-Action Shakers

Program and walk away—no need to monitor

- Select between orbital or reciprocating motion
- Eliminate inadvertent changes—features keyboard lock
- Minimize sample damage and wear with slow start/stop feature
- Easy-to-use programmable keypad identifies errors

Shaker always stops at same position allowing for semi-automated sampling or dosing. Opto-electric feedback calculates motor output with weight load to avoid speed variations and drive motor self-checks rpm to ensure set values are maintained. Brushless DC motor gives long maintenance-free operation. Order universal platform separately below. Compatible test tube racks and clamps sold below.

What's included: 6-ft (1.8-m) cord with plug.



Specifications

Speed range: 10 to 300 rpm

Timer range: run time (999 hr 59 min), pause (1 to 99 min), forward and backward (10 sec to 9 min 50 sec)

Max	Orbit size;	Platform	Power		Catalog	
load	recip stroke length	dimensions	VAC	Hz	number	Price
22 lb	3/4" to 11/2" dia;	14" x 14"	120	60	GY-86578-20	
(10 kg)	3/4" to 11/2"	(35.6 x 35.6 cm)	240	50/60	GY-86578-21	
33 lb	3/4" to 11/2" dia;	18" x 18"	120	60	GY-86578-22	
(15 kg)	3/4" to 11/2"	(45.7 x 45.7 cm)	240	50/60	GY-86578-23	
55 lb	11/4" to 23/4" dia;	30" x 18"	120	60	GY-86578-24	
(25 kg)	11/4" to 23/4"	(76.2 x 35.6 cm)	240	50/60	GY-86578-25	



Accessories

GY-86578-30 Universal platform, 14" x 14" **GY-86578-31** Universal platform, 18" x 18" **GY-86578-32** Universal platform, 30" x 18" **GY-86578-33** Spring wire rack, 14" x 14" **GY-86578-34** Spring wire rack, 18" x 18" **GY-79510-91** Spring wire rack, 30" x 18" **GY-86578-36** Rubber mat, 14" x 14" GY-86578-37 Rubber mat, 18" x 18"

GY-86578-38 Rubber mat, 30" x 18"

Digital Incubating/Refrigerating Shakers Orbital / reciprocating motions in one unit

- Variable 10 to 300 rpm speed control via the user-friendly keypad with push-button controls
- Fan circulation ensures excellent temperature uniformity

The air spring door and lid guard against sudden closures. Self-diagnostic function identifies any errors and advises correction procedures. Slow start/stop feature minimizes wear and sample damage. Rugged construction permits heavier loads.

A wide range of accessories are available below. Universal platform is a predrilled tray which accepts flask, funnel, and rack clamps.

What's included: power cord. Floor models available; call your local representative.

Specifications

Orbit size: 1.2"

Shaking speed: 10 to 300 rpm (±1 rpm accuracy)

Temperature accuracy: ±0.1°C at 38°C Temperature uniformity at 38°C: ±0.5°C Timer: 1 minute to 99 hours 59 minutes Construction: stainless steel interior. powder coating steel exterior, anodized duralumin platform

Type	Capacity	Temperature	Dimensions (\	Dimensions (W x H x D)		Catalog	Price								
Type	Gapacity	range	Chamber	Platform	(VAC, Hz)	number	FIICE								
Benchtop m	odels with 22-II	(10-kg) maxim	um load and 14-gallo	on (53-L) chamb	er volume										
		5°C above			230, 60	GY-79510-29									
Heated		ambient to			230, 50	GY-79510-31									
	4 x 1-L flask, 2 x 2-L flask	60°C	16" x 12½" x 16"	13¾" x 13¾"	120, 50/60	GY-79510-32									
		2 x 2-L flask		(41 x 32 x 41 cm)	(35 x 35 cm)	230, 60	GY-79510-34								
Refrigerated					15° to 60°C	60°C		230, 50	GY-79510-36						
														120, 60	GY-79510-38
Benchtop m	odels with 33-II	o (15-kg) maxim	um load and 22-gallo	on (83-L) chambe	er volume										
		5°C above			230, 60	GY-79510-45									
Heated		ambient to			230, 50	GY-79510-47									
	7 x 1-L flask,	60°C	20" x 12½" x 20"	17¾" x 17¾"	120, 50/60	GY-79510-48									
	5 x 2-L flask		(51 x 32 x 51 cm)	(45 x 45 cm)	230, 60	GY-79510-50									
Refrigerated		15° to 60°C			230, 50	GY-79510-52									
					120, 60	GY-79510-54									



Universal Platforms

Description	Catalog number	Price
For model A	GY-79510-40	
For model B	GY-79510-56	

Clamps for Flat-Bottomed Erlenmeyer Flasks

Flask volume	Catalog number	Price
50 mL	GY-79510-94	
100 mL	GY-79510-96	
250 mL	GY-79510-98	
500 mL	GY-79511-00	
1000 mL	GY-79511-02	
2000 mL	GY-79511-04	

Test Tube Racks

Capacity	Catalog number	Price
86 holes, up to 8-mm dia	GY-79511-14	
86 holes, up to 10-mm dia	<u>GY-79511-16</u>	
58 holes, up to 12-mm dia	<u>GY-79511-18</u>	
58 holes, up to 14-mm dia	<u>GY-79511-20</u>	
32 holes, up to 16-mm dia	GY-79511-22	
19 holes, up to 25-mm dia	GY-79511-24	

Benchtop Incubating Shakers

Control shaking speed accurately

- Small footprint requires minimal bench space
- Simultaneously view speed, time, and temperature on digital model

Analog shaker features a rotary dial with variable 40 to 400 rpm speed control. Tachometer monitors and displays speed in rpm. Unit can be set for timed studies from 1 to 60 minutes or operate continuously.

Digital shaker features variable 15 to 500 rpm speed control. Visual/audible signals alert operator to temperature deviations of ±1°C from set point. Unit will shut down and alert operator if rotation varies ±10% of set speed preventing shaker from walking. Soft start feature eliminates splashing of vessel contents and helps prevent sudden starts and stops.

What's included: 120 VAC models include an 8-ft (2.4-m) cord with US standard plug; 240 VAC models include an 8-ft (2.4-m) cord with European plug. Order universal platform 51706-50 separately below and clamps separately below.



Specifications -

Orbit size: 0.75" Temperature accuracy: ±0.1°C Temperature uniformity: ±5°C

Timer

Analog models: 1 to 60 minutes Digital models: 0.1 to 999 hours Maximum load: 35 lb (15.9 kg) Platform dimensions: 11" x 13" (order platform separately, holds up to four 1-L flasks)

c(ŲL)us (€

Speed range	Temperature	Po	wer	Catalog	Duine			
(rpm)	range	VAC	Hz	number	Price			
Analog shake								
40 to 400	5°C above ambient	120	50/60	GY-51960-00				
40 10 400	to 80°C	240	50/60	GY-51960-02				
Digital shaker								
15 to 500	5°C above ambient	120	50/60	GY-51960-04				
13 10 300	to 80°C	240	50/60	<u>GY-51960-06</u>				

GY-51706-50 Universal platform, 11" x 13" (27.9 x 33 cm)

Benchtop Incubating/Refrigerating Shakers

Save bench space and money

- Combines a benchtop incubator/refrigerator with an orbital shaker
- Available in three temperature ranges

Shakers feature a triple eccentric drive that handles heavy workloads, provides uniform agitation, and enables continuous 24-hour operation. Also includes an overtemperature safety feature with independent thermostat and safety interlock that stops platform motion when lid is open.

Analog Shakers feature a DC motor and variable speed control from 40 to 400 rpm. Integrated tachometer monitors and displays speed in rpm.

Digital Shakers feature a solid-state DC brushless motor and variable speed control from 15 to 500 rpm. View speed, time, and temperature simultaneously on separate LED displays. Visual/ audible signals alert you to temperature deviations; unit turns off if temperature deviates ±1°C from set point.

What's included: 120 VAC models include an 8-ft (2.4-m) cord with US standard plug; 240 VAC models include 8-ft (2.4-m) cord with European plug. Order platform and clamps separately at right.

Model Speed		Temperature	Power		Catalog	Price
Model	range (rpm)	range	VAC	Hz	number	Price
Analog shal	cers	•				
Heated		10°C above ambient to 60°C	120 240	50/60	GY-51707-00 GY-51707-05	
High temperature	40 to 400	10°C above ambient to 80°C	120 240	50/60	GY-51707-10 GY-51707-15	
Refrigerated		15°C below ambient to 60°C	120 240	50/60	GY-51707-20 GY-51707-25	
Digital shak	ers					
Heated		10°C above ambient to 60°C	120 240	50/60	GY-51707-30 GY-51707-35	
High temperature	15 to 500 (±1 rpm accuracy)	10°C above ambient to 80°C	120 240	50/60	GY-51707-40 GY-51707-45	
Refrigerated	accuracy)	15°C below ambient to 60°C	120 240	50/60	GY-51707-50 GY-51707-55	

GY-51706-52 Universal platform, 18" x 18" (45.7 x 45.7 cm) US Toll-free: 800-323-4340



c(VL)us (E (E) Specifications

Orbit size: 0.75"

Temperature accuracy: ±0.1°C Temperature uniformity: ±0.5°C

Timer

Analog models: 1 to 60 minutes Digital models: 0.1 to 999 hours

Maximum load: 50 lb (22.7 kg) at 400 rpm Platform dimensions (L x W): 18" x 18" (45.7 x 45.7 cm) (order separately below, left)

Clampe for Universal Diatforms

Ciamps for Universal Flationns										
Flask	Maximu	um numbe	n number of clamps per platform size			Catalog	Price/ea			
size	11" x 13"	18" x 18"	18" x 24"	30" x 18"	36" x 24"	number	riice/ea			
For mic	For microplate/deep-well plates									
_	5	10	15	18	29	GY-51706-70				
For Erle	nmeyer fl	asks								
10 mL	60	113	157	112	160	GY-51706-72				
25 mL	60	64	80	112	160	GY-51706-74				
50 mL	30	32	40	112	160	GY-51706-76				
125 mL	13	32	40	44	80	GY-51706-78				
250 mL	9	16	23	24	40	GY-51706-80				
500 mL	6	16	20	18	40	GY-51706-84				
1 L	4	9	10	12	21	GY-51706-86				
2 L	1	6	5	6	11	GY-51706-88				

51605-00

Cole-Parmer® Rocking Platform Shakers

Shake at the speed and angle you need

- Designed to function in temperature controlled environments from 4 to 65°C and 85% humidity
- Platform rocks from 4 to 160 tilts per minute
- Degree of tilt is adjustable ±20°
- Solid-state speed control ensures speed remains constant

What's included: UL-listed power supply. The 115 VAC models have a 4-ft (1.2-m) power cord with US standard plug; 230 VAC models have a 5-ft (1.5-m) cord with European plug.

Specifications

Speed range: 4 to 160 oscillations per minute **Maximum load:** 15 lb (6.8 kg)

Chaking angle	Platform dimensions	Power			Catalog	Price	
Snaking angle	(W x H x D)	VAC	Hz	Amps	number	Price	
Adjustable	14" x 7" x 13"	115	60	0.5	GY-51401-01		
through	(35.6 x 17.8 x 33 cm)	230	50	0.3	GY-51401-06		
20° from horizontal	20° from 14" x 11½" x 13"	115	60	0.5	GY-51401-11		
	(35.6 x 29.2 x 33 cm)	230	50	0.3	GY-51401-16		
	20° from	Adjustable through 20° from (W x H x D) Adjustable 14" x 7" x 13" (35.6 x 17.8 x 33 cm) 14" x 11½" x 13"	Adjustable through 20° from 14" x 111½" x 13" 115	Shaking angle (W x H x D) VAC Hz Adjustable through 20° from 14" x 7" x 13" (35.6 x 17.8 x 33 cm) 115 60 60 14" x 11½" x 13" 115 60 115 60	Shaking angle (W x H x D) VAC Hz Amps Adjustable through 20° from 14" x 7" x 13" 115 60 0.5 14" x 11½" x 13" 230 50 0.3 14" x 11½" x 13" 115 60 0.5	Shaking angle (W x H x D) VAC Hz Amps number Adjustable through 14" x 7" x 13" 115 60 0.5 GY-51401-01 20° from 14" x 11½" x 13" 115 60 0.5 GY-51401-06 14" x 11½" x 13" 115 60 0.5 GY-51401-11	



Dry Powder Rocking Shaker

Protect against chemical deterioration

- Adjustable silicone-lined rack
- Unique mixing motion tosses powder from end-to-end while also rotating it
- Adjustable tilt capability and variable-speed control

What's included: 6-ft (1.8-m) three-wire cord with plug (US standard plug on 120 VAC models; three-wire plug on 240 VAC models).

Speed	Maximum	Bottle	Shaking	Power			Catalog	Price
range	load	size	angle	VAC	Hz	Amps	number	FIIGE
2 to 60 rpm	15 lb	7" to 10" H; up to 7" dia	0 to 20°	120 240	50/60	1.50 0.75	GY-51605-00 GY-51605-15	

Shown with bottle (not included) Œ

Compact Digital Rocking Shaker

Place in incubators (non CO₂), chambers, and refrigerators

- PID control for a consistent, smooth rocking motion
- Digital speed control easily adjusts from 5 to 100 rpm
- Adjustable tilt angle from 7 to 13° ensures gentle sample agitation
- Use in timer mode up to 99 hrs 59 minutes or continuous rocking

What's included: dimpled silicone mat, tray, two securing bands, and power cord (model 04725-06 has plug for US; model 04725-07 has plugs for China, Europe, and UK).

Shaking	Pov	wer	Diverture	Catalog	Price
range	VAC	Hz	Plug type	number	Price
7 to 13°	100 to 240	50/60	US	GY-04725-06	
7 10 13	100 to 240	30/60	Assorted [†]	GY-04725-07	

[†]Model 04725-07 includes cord set with plugs for China, Europe, and UK.

GY-04725-88 Rubber sticky mat and tray

GY-04725-89 Dimpled silicone mat and tray

GY-04725-90 Universal harness. Includes tray, sticky pad, and rubber bands

GY-04725-91 Rubber bands for universal harness



Specifications

Speed range: 5 to 100 rpm Maximum load: 11 lb (5 kg) Timer: 1 min to 99 hours, 59 min Platform dimensions: 10\%" x 10\%"





Tube Revolver

Be more flexible with interchangeable paddles

- Small footprint
- Paddles are adjustable from 0 to 90° to optimize the mixing angle
- Set in "oscillating" mode to achieve more effective mixing, oscillation occurs every 40 degrees in the rotation cycle
- Variable speed with easy-to-use intuitive controls
- Maintenance-free motor provides quiet operation

What's included: two 7 x 10/15-mL paddles, two 7 x 5/7-mL paddles, two 15 x 1.5/2-mL paddles, one 6 x 50-mL paddle, and power cord with plug (model 04725-16 has plug for US; model 04725-17 has plugs for China, Europe, and UK).

Cucad vanua	Pov	wer	Diverture	Cotolog number	Price	
Speed range	VAC	Hz	Plug type	Catalog number	Price	
10 to 40 rpm	100 to 240	50/60	US	GY-04725-16		
10 to 40 rpm	100 (0 240	30/60	Assorted†	GY-04725-17		





Paddle Attachments

Paddle capacity	Cat. no.	Qty/pk	Price/pk
7 x 10/15-mL tubes	GY-04725-71	2	
7 x 5/7-mL tubes	GY-04725-72	2	
15 x 1.5/2-mL tubes	GY-04725-73	2	
21 x 0.5/0.8-mL tubes	GY-04725-74	2	
6 x 50-mL tubes	GY-04725-75	1	

Stovall Belly Dancer™ Shaker

Ensure thorough mixing

- Unique, undulating motion with suction feet
- Constructed with chemically resistant materials
- Lightweight and extremely quiet

Trouble-free construction contains no belts or pulleys. High-quality shunt wound DC motor and control. Variable-speed control, from 0 to 125 rpm.



Collar adjustment varies platform angle from flat to 12° pitch. Orbital throw is 1" (2.5-cm). The open-sided platform accommodates oversize containers.

What's included: a platform, removable nonskid mat, 6-ft (1.8-m) 110/115 VAC power cord (no cord included for 220/240 VAC model).

Specifications -

Speed range: 0 to 125 rpm Maximum load: 20 lb (9.1 kg) Platform dimensions (W x D): 12" x 12" (30.5 x 30.5 cm)

	Power		Catalog	Price	
VAC	Hz	Amps	number	Price	
110/115 220/240	50/60	1.5	<u>GY-51650-00</u> <u>GY-51650-05</u>		

Wait!

There's More at ColeParmer.com

US Toll-free: 800-323-4340

Find all the product specs you need!

Wrist-Action® Shakers

Get wrist-action mixing without holding samples

- Adjustment arm lets you choose the shaking amplitude



Two "flask-holding" configurations are available: models with side arm capacity only or models with side arm and top platform capacity. Shaking amplitude is controlled with the adjustment arm. Overload protection turns shaker off in event of a malfunction.

What's included: side arm clamps and a 7-ft (2.1-m) cord with US standard plug; models with a top platform also include a set of 10 platform clamps.

Specifications -

Speed: 385 oscillations/min (±10%) Timer range: 0 to 60 min or continous Max load: 10 lbs.

Shaking angle: 0 to 15° Platform dimensions (W x D): 17" x 7¾" (43.1 x 19.7 cm)

	Flask capacity Vessel capacity side arms Platform capacity		115 VAC,	60 Hz	220 VAC, 50 Hz	
			Catalog number	Price	Catalog number	Price
	4	None	GY-51100-01		GY-51100-02	
	8	None	GY-51100-20		GY-51100-25	
	12	None	GY-51100-30		GY-51100-35	
	4	8†	GY-51100-80		GY-51100-85	
	8	8†	GY-51100-90		GY-51100-95	
	12	8†	<u>GY-51100-96</u>		<u>GY-51100-97</u>	

†250-ml_flasks

Cole-Parmer® Roto-Torque® Rotator

Mix gently and efficiently

- Lock at the desired angle with the adjustable tilt stand (included)

- Speed range from 3 to 80 rpm

What's included: 6-ft (1.8-m), three-wire cord (model 07637-21 has a plug; model 07637-22 has stripped ends. Order required disc and clips separately below.





Cuond rouge	Shaking angle	Power		Catalog	Dutas
Speed range		VAC	Hz	number	Price
3 to 80 rpm	±45°	115 230	50/60	<u>GY-07637-21</u> <u>GY-07637-22</u>	

Roto-Torque Attachment (Required)

Multipurpose disc accommodates different-sized test tubes and flasks. Holds 30 tubes on side or 16 on surface. Unit comes with thirty 10 to 15-mm size clips and twenty 15- to 20-mm size clips. Order larger clips (25- to 40-mm) separately.

GY-07637-23 Multipurpose disc, 7" (17.8 cm) diameter

GY-07637-41 Disc clips, 10 to 15 mm size. Pack of 12

GY-07637-51 Disc clips, 15 to 20 mm size. Pack of 12

GY-07637-70 Disc clips, 25 to 40 mm size. Pack of 12

Tubes shown clipped to the surface of the disc.

Cole-Parmer[®] Multipurpose Mixer/Rotator

Save money—get three shakers in one!









Cole-Parmer®

Versatile mixer/rotator can perform three modes of mixing

individually or in the same run. Fully programmable unit allows you to set time, shaking speed, rotation angle, and pauses from 1 second to 12 hours (depending on mode). Two interchangeable platforms (included) feature unique flexible rubber grippers that securely hold a range of tube sizes from 1.5 to 50 mL.

What's included: 22-place platform (22 tubes from 1.5 to 15 mL), 8-place platform (6 x 50-mL tubes; 2 tubes from 1.5 to 15 mL), and universal power adapter.

Specifications

Shaking angle:

Rotating mode: 360° Reciprocating mode: 15 to 90° (in 15° increments) Vortexing mode: 1 to 5°

Timer:

Rotating mode: max time 12 hrs Reciprocating mode: max time 999 seconds

Vortexing mode: max time 12 hrs

Speed range	Power	Catalog number	Price
5 to 30 rpm	110/220 VAC	GY-04726-02	

Vortex Mixer

Store it easily when not in use

 Choose between continuous or pulse mode



Automatic overload shutoff

 Sturdy design and weight keeps unit from "walking" while in use

- Variety of accessories accommodates different-sized vessels

What's included: pop-off rubber platform and power cord (model 04725-01 has plug for US;

(model 04725-01 has plug for US; model 04725-03 has plugs for China, Europe, and UK).



Cwood	Pow	er	Diverture	Catalog	Price
Speed	VAC	Hz	Plug type	number	
0 to 3000 rpm	0 to 2000 rpm 100 to 240 E0/6	50/60	US	GY-04725-01	
U to Sout Ipili	100 to 240	50/60	Assorted†	GY-04725-03	

†Model 04725-03 includes cord set with plugs for China, Europe, and UK.

Accessories

GY-04725-92 Microplate tray

<u>GY-04725-93</u> Replacement pop-off rubber platform

GY-04725-94 Tube holder with insert retainer

GY-04725-95 Tube holder with insert retainer, for 16 x 10-mm tubes

<u>GY-04725-96</u> Tube holder with insert retainer, for 9 x 12-mm tubes <u>GY-04725-97</u> Tube holder with insert retainer, for 9 x 15-mm tubes

GY-04725-98 Tube holder with insert retainer, for 5 x 20-mm tubes

GY-04725-99 Tube holder with insert retainer, for 4 x 25-mm tubes

Cole-Parmer® Vortex Mixer

Mix more efficiently with true circular orbit

- Variable speed for general mixing to resuspending pellets
- No tools needed to replace heads
- Safe for cold room or incubator use

Shaker features two modes for both "touch" and continuous operation. The standard cup head supplied with the vortexer accommodates a single test tube.

What's included: standard cup head and 3½-ft (1-m) power cord.

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Cunnel rouge	Power			Catalog	Drice
Speed range	VAC	Hz	Amps	number	Price
0 to 3400 rpm	120	60	0.6	GY-04726-01	
0 to 2850 rpm	230	50	0.3	<u>GY-04726-03</u>	

GY-04726-07 Optional head for 24 x 1.5-mL, 24 x 0.5-mL, and 32 x 0.2-mL tubes

GY-04726-08 Optional head for 1 microplate or 64 x 0.2-mL tubes or 8 x 0.2-mL tubes

GY-04726-09 Optional head for 8 x 15-mL and 8 x 12-/13-mm diameter tubes

GY-04726-11 Optional head for 6 x 50-mL tubes

GY-04726-12 Optional head for 12 x 1.5-/2.0-mL tubes, held horizontally

GY-04726-13 Optional head for 4 x 15-mL tubes, held horizontally

GY-04726-14 Optional head for 2 x 50-mL tubes, held horizontally



Vortex Mixer with Infrared Sensor

Reduce repetitive wrist strain

- Infrared sensor mode detects when a tube is present and automatically starts mixing, without any applied pressure, or operate in continuous "touch" mode
- Quiet operation with soft-start feature and controlled ramping
- Variable speeds up to 3000 rpm for applications from gentle mixing to vigorous vortexing

- Polymer/zinc alloy construction is easy to clean and offers excellent chemical resistance

- Optional accessories accommodate a broad range of vessels, greatly expanding its uses

What's included:

standard pop-off cup for single test tube and a 6-ft (1.8-m) power cord with plug.



Cwood	Pov	wer	Catalog	Price
Speed	VAC	Hz	number	
0 to 3000 rpm	100/240	50/60	GY-86579-03	

GY-86579-22 Microtube adapter; foam, holds 19 x 1.5-mL

GY-86579-23 Microplate adapter; foam, holds one 96-well microplate

GY-86579-24 Test tube adapter; foam, holds five 16-mm tubes

GY-86579-25 Small platform; rubber, 2" (5.1 cm) dia

GY-86579-27 Large platform; soft foam, 3¾" (9.5 cm) dia

Wizard Vortex Mixer

No pressure needed—automatically activates when object is near

- Two modes of operation-sensor or continuous
- Infrared system detects the presence of a test tube and starts vibration automatically

The Wizard features a small footprint, low profile, and ergonomic design. Three anti-sliding feet absorb vibration and enhance stability. Adjustable speed lets you set at low speeds for gentle mixing or high speeds for more vigorous mixing. Wide operating ambient temperature range makes

mixer ideal for cold rooms or incubators.

What's included: standard pop-off cup for single test tube, and 6-ft (1.8-m) cord with plug.



Speed range: 0 to 3000 rpm Platform dimensions: 2" (5.1 cm) dia

Overall dimensions (W x H x D): 7" x 21/2" x 85/8" (17.8 x 6.4 x 21.9 cm)

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	Power	Catalog	Price	
VAC Hz		Amps		number
115/230	50/60	0.26	GY-86579-20	

GY-86579-22 Microtube adapter; foam, holds 19 (1.5-mL) microtubes

GY-86579-23 Microplate adapter; foam, holds 96-well microplate

GY-86579-24 Test tube adapter; foam, holds five 16-mm tubes

GY-86579-25 Small platform; rubber, 2" (5.1 cm) dia

GY-86579-26 Large platform; foam, 3¾" (9.5 cm) dia GY-86579-27 Large platform; soft foam, 33/4" (9.5 cm) dia

GY-86579-28 Replacement pop-off cup

Shakers

Vortex-Genie Shakers

Maximize high-speed touch mixing

- Won't "walk" across your benchtop

Vortex-Genie® 1 Shaker has a single high-speed mixing action that eliminates operator error for highly reproducible results. Includes pop-off cup; 3" (7.6-cm) platform sold separately

Vortex-Genie® 2 Shaker allows you to control speed intensity by varying pressure to the head. The variable speed shaking allows you to adjust the level of mixing from gentle shaking to vigorous vortexing. Easy-to-change platforms allow you to adapt your shaker to a variety of applications. Shaker comes with a pop-off cup for single tube shaking and a standard 3" (7.6-cm) platform for multiple tube or flask shaking. Order optional platform starter kits below to customize the shaker for your application.

Vortex-Genie® 2T Shaker features both touch and hands-free operation. Shake samples from 1 to 60 seconds in touch mode, 1 to 60 minutes in hands-free mode, or continuously in the automatic untimed mode. The 2T shaker accepts all standard Genie attachments and accessories making it an economical addition to you laboratory. Includes pop-off cup and 3" (7.6-cm) platform.

Digital Vortex-Genie® 2 Shaker features both touch and hands-free operation with increased timer range. Shake samples from 1 to 99 seconds in touch mode, 1 to 99 minutes in hands-free mode, or continuously in the automatic untimed mode. Digital display provides accuracy, reproducibility, and repeatability. Accepts all standard Genie attachments and accessories and includes pop-off cup and 3" (7.6-cm) platform.

Vortex-Genie® Pulse Shaker offers true pulsing action, providing more collisions and random motion. Ideal for applications requiring more aggressive action than standard vortexing. Fully programmable—the variable run/stop time provides quick pulsing or interval mixing to keep samples in suspension, or use in continuous mode for vortexing. Featuring digital control and display of speed and time, this shaker will deliver reproducible and accurate mixing. Accepts all standard Genie attachments and accessories and includes pop-off cup and 3" (7.6-cm) platform.

Platform

11/8" dia pop-off cup

11/8" dia pop-off cup,

3" dia platform

What's included: power cord with plug (no plug on 230 VAC models).

Touch mode

1 to 60

seconds

1 to 99

seconds

0.1 sec to 99

minutes

Timer range

Hands-free

1 to 60

minutes

1 to 99

minutes

1 to 99

minutes









GY-04724-38

GY-04724-61 Platform with cover,

3" (7.6-cm) dia

Speed range

600 to 2700 rpm

600 to 2700 rpm

600 to 3200 rpm

600 to 2700 rpm

500 to 3000 rpm

500 to 3000 rpm

Vortex-Genie 1 shaker 600 to 3200 rpm

Vortex-Genie 2 shaker 600 to 3200 rpm

Vortex-Genie 2T shaker

Digital Vortex-Genie 2 shaker

Vortex-Genie Pulse shaker

GY-04724-60 Replacement cup for single tube shaking

GY-04724-70 Thermoplastic rubber cover protects standard 3" (7.6-cm) platform

GY-04724-54 Small ampule shaker attachment

GY-04724-55 Large ampule shaker attachment

GY-04724-57 TurboMix™ shaker attachment

GY-04724-63 Microtube holder

for 12 x 2-mL tubes

GY-04724-64 Vertical tube holder. Holds

3 x 50-mL tubes

GY-04724-65 Vertical tube holder. Holds 6 x 15-ml tubes

GY-04724-89 Vertical tube holder. Holds 6 x 50-mL, 6 x 15-mL, and 12 microtubes

GY-04724-66 Vertical microtube holder. Holds 9 microtubes

0.65

230 50/60 0.5 **GY-04724-39**

GY-04724-67 Molded bottom closure and screw kit

GY-04724-83 Platform, 6" (15.2 cm)

GY-04724-84 Recessed platform

GY-04724-85 Tube insert[†], foam;

9-16 mm. Set of 2 GY-04724-86 Tube insert[†], foam;

14-29 mm. Set of 2

GY-04724-87 Tube insert[†], foam;

29-37 mm. Set of 2

120

60

GY-04724-88 Blank insert[†], foam.

†Requires recessed platform 04724-84 (sold separately above).



Beaker/Tube Platform Starter Kit includes one recessed platform for beakers up to 250 mL, two elastic bands, and one tube insert assortment set (Set includes one foam insert each for 9 to 16 mm, 14 to 29 mm, and 29 to 37 mm tubes; and one blank insert).

GY-04724-80 Beaker/tube platform starter kit

GY-04724-82 Replacement elastic bands[†]. Set of 2

GY-04724-81 Replacement tube insert assortment[†]. Set of 4

[†]Requires recessed platform 04724-84 (sold separately at left).

Microtube/Microwell Plate Platform Starter Kit contains one 6" (15.2 cm) platform, one 6" (15.2 cm) foam insert for 60 microcentrifuge tubes, and one 6" (15.2 cm) foam insert for a single microwell plate.

GY-04724-50 Microtube/microwell plate platform starter kit

GY-04724-51 Replacement micro tube inserts[‡] hold up to 60 microtubes. Pack of 2

GY-04724-53 Double-tier microwell plate insert

‡Requires platform 04724-83 (sold separately at left).