# Digital incubating/ refrigerating benchtop shakers.

Transparent lid offers great visibility and gas spring supports ensure hand-down handling of the samples by allowing immediate and easy access to your samples.



## IST-3075 / IST-4075R

with optional dedicated platform and universal attachment

Optional accessories<br/>see page 95-97• Universal platforms, Rubber mats<br/>• Flask clamps, Funnel clamps, Test tube racks, Gateway



Control display

Gas spring lid



### Performance

- Temperature range:
- Ambient +5°C to 80°C for IST-3075 / 4075.
- Ambient -15°C (Min. 15) to 80°C for IST-3075R / 4075R.
- · Competitive high shaking speed up to 500 rpm.
- Orbital shaking motion in 19mm diameter.
- · Microprocessor PID control.
- Three point temperature calibration / Automatic tuning.
- Wide speed range even with heavy workload.
- Equipped with a maintenance-free BLDC motor to generate smooth, quiet, uniform, and yet powerful shaking motion.
- Best effort run function intelligently manages its rpm to keep shaking even workload is out of its capacity.
- Automatic shaking speed adjustment in case of excessive workload such as unbalanced load placement, unusual vibrations caused from unstable floor or external shock.
- Pleasant test environment by the smooth acceleration and deceleration control.
- Smooth start and smooth stop function prevents chemical spills from flasks or test tubes.
- High-velocity fan ensures uniform temperature distribution and rapid thermal recovery after door open.
- Air-tight silicone door seal to provide excellent temperature uniformity.

### Convenience

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Easy-set digital timer for shaking operation.
  (1 min. to 999 hr. 59 min.)
- Wide sample monitoring and convenient sample loading.
  Convenient sample monitoring without affecting inside environment thanks to the three side transparent acryl lid with bright LED lamps.
- Gas spring lid supports providing smooth motion, soft opening and closing.
- Repetitive task can be easily performed as the platform stops where it starts.
- Stopping the shaking platform always at the same position is highly beneficial for automated dosing or sampling process.
- Corrosion resistance stainless steel interior.
- Built-in RS-232 port and USB port for external control and data collection.

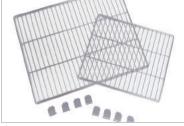
### Safety

- Automatic run after power interruption.
- Temperature and shaking speed deviation alarm.
- Over-current protection, Stalled platform check.
- · Mechanical over-temperature protection device.
- Environment-friendly CFC-free refrigerant. (for IST-3075R / 4075R)
- · Audible and visible open door alarms.

	Model	IST-3	3075	IST-3	075R	IST-4	4075	IST-4	075R	
	Range (℃ / ℉)	Amb. +5 to / Amb. +9 t		Amb15 (M / Amb27 (I	in. 15) to 80 Vin. 27) to 176	Amb. +5 to / Amb. +9 t		Amb15 (Mi / Amb27 (N	n. 15) to 80 Ain. 27) to 176	
Fluctuation Temperature at 37℃ in flask (±℃ / ℉)		0.1 / 0.18	0.1 / 0.18							
	Variation at 37℃ in flask (±℃ / ℉)	0.5 / 0.90								
	Refrigerator (Hp)	-	1 / 6 HBP					1/6 HBP		
	Motion type	Orbital								
	Amplitude size (mm / inch, dia.)	19.1 / 0.75	9.1 / 0.75							
Shaking	Speed range (RPM)	20 to 500								
system	Accuracy	±1% of set speed (>100rpm) / ±1 (≤100rpm)								
0,010111	Timer	1 min. to 999 hr 59 min.								
	Max. load (kg / lbs)	10 / 22.0 at 15 / 33.1 at				14 / 30.9 at 500 rpm 21 / 46.3 at 400 rpm				
	Volume (L / cu ft)	53 / 1.9	·			83 / 2.9				
	Platform (W×D) (mm / inch)	350×350/	13.8×13.8			450×450 / 17.7×17.7				
Dimension	Interior (W×D×H) (mm / inch)	410×410×3	20 / 16.1×16	.1×12.6		510×510×3	20/20.1×20	.1×12.6		
	Exterior (W×D×H) (mm / inch)	440x785x5	10 / 17.3x30.9	9x20.1		540x 890 x	510 / 21.3x35	x20.1		
	Net weight (Kg / Ibs)	65 / 143.3		73 / 160.9		81 / 178.6		90 / 198.4		
Electrical requirements (230V)		60Hz, 4A	50Hz, 4A	60Hz, 5.5A	50Hz, 5.5A	60Hz, 4A	50Hz, 4A	60Hz, 5.5A	50Hz, 5.5A	
Cat. No.		AAH23411K	AAH23422K	AAH23511K	AAH23522K	AAH23611K	AAH23622K	AAH23711K	AAH23722K	
Electrical requ	irements (120V)	60Hz	, 7.5A	60Hz,	10.1A	60Hz, 7.5A		60Hz, 10.1A		
Cat. No.		AAH2	3465U	AAH2	3565U	AAH23665U		AAH23765U		

\* FDA establishment registered company. FDA listed products.

for Incubators





Wire shelves

Perforated shelves

Universal platforms

## Wire shelves

Stainless steel and electro-polished shelves are readily removed without using tools for easy cleaning.

Cat Na		De	scription	Suitable for
Cat. No.	Included	Maximum	W×L (mm / inch)	Suitable for
EDA8136	2	7	366×316 / 14.4×12.4	IB-05G
EDA8135	2	11	446×366 / 17.6×14.4	IB-15G
EDA8137	2	11	576×419/22.7×16.5	IB-25G
EDA8136	2	10	366×316 / 14.4×12.4	IB-01 E
EDA8220	2	13	466×490 / 17.6×19.3	IB-11E
EDA8219	2	14	566×466 / 22.3×17.6	IB-21E
EDA8136	4	14	000 010 / 14 4 40 4	IB-02G-2C
EDA8130	8	28	366×316 / 14.4×12.4	IB-02G-4C
	2	11		IL3-15(A)
EDA8219	4	22	566×466 / 22.3×17.6	IL-11-2C
	8	44		IL-11-4C
EDA8220	3	25	466×490 / 17.6×19.3	IL3-25(A)
EDA8223	1	5	195×310 / 7.7×12.2	ILP-02
EDA8221	2	10	305×299 / 12×11.8	ILP-12
EDA8235	2	8	416×406 / 16.4×16.0	ISS-3075(R)
EDA8233	2	11	516×506 / 20.3×19.9	ISS-4075(R)
EDA8244	2	4	247×247 / 9.7×9.7	IM-10

## **Perforated shelves**

Stainless steel shelves are readily removed without using tools for easy cleaning.

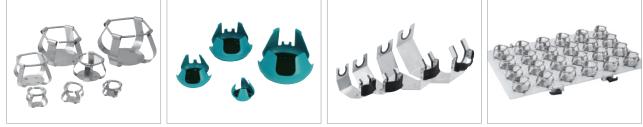
0-4 11-		Description	Outstalls for
Cat. No.	Maximum	W×L (mm / inch)	Suitable for
AAA12531	7	366×316 / 14.4×12.4	IB-05G
AAA12532	11	446×366 / 17.6×14.4	IB-15G
AAA12535	11	576×419 / 22.7×16.5	IB-25G
AAA12531	10	366×316 / 14.4×12.4	IB-01E
AAA22522	13	466×490 / 17.6×19.3	IB-11E
AAA22521	14	566×466 / 22.3×17.6	IB-21E
AAA12531	14	366×316 / 14.4×12.4	IB-02G-2C
AAA 1255 1	28	300×310714.4×12.4	IB-02G-4C
	11		IL3-15(A)
AAA22521	22	566×466 / 22.3×17.6	IL-11-2C
	44		IL-11-4C
AAA22522	25	466×490 / 17.6×19.3	IL3-25(A)
AAA24501	5	195×310 / 7.7×12.2	ILP-02
AAA24502	10	305×299 / 12×11.8	ILP-12
AAA24511	4	247×247 / 9.7×9.7	IM-10

## **Stacking kits**

Stackable up to 2 units using exclusive stacking kits for space saving.

Cat. No.	Description	Suitable for		
AAA21521	Stacking kits for stackable chambers	IB-05G		
AAA21522	Stacking kits for stackable chambers	IB-15G		
AAA21523	Stacking kits for stackable chambers	IB-25G		
AAA26501	Stacking kits for stackable chambers	IB-01E		
AAA26502	Stacking kits for stackable chambers	IB-11E		
AAA26503	Stacking kits for stackable chambers	IB-21E		

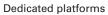
### for Incubated Shakers



Flask clamps

#### Plastic clamps (plastic)

#### Funnel clamps



### Universal platforms / Flask clamps / Funnel clamps

Universal platforms provide flexibility for mixing assortments of test tubes and glassware of varying sizes on a single platform. Various clamps for Erlenmeyer flasks and separatory funnels are available.

Doc	cription	Model	IST-3075(R)	IST-4075(R)	ISF-7100(R) ISF-7200(R)	ISS-7100(R) ISS-7200(R)	ISS-3075(R)	ISS-4075(R)
Des	chption	Platform size	350×350mm / 13.8x13.8inch	450×450mm / 17.7×17.7inch	755×520mm / 29.7×20.5inch	755×520mm / 29.7×20.5inch	350×350mm / 13.8x13.8inch	450×450mm / 17.7×17.7inch
Universal platf	orm		AAA23501-V3	AAA23502-V3	AAA23503-V3	AAA23503-V4	AAA23501-V3	AAA23502-V3
	Erlenmeyer flask s	size	Max. mountab	le flask clamps		,		,
	for 50 ml	AAA23550	36	49	88	88	36	49
Flask	for 100 ml	AAA23551	24	39	68	68	24	39
	for 250 ml	AAA23552	14	20	39	39	14	24
	for 300 ml	AAA23556	14	20	39	39	14	24
clamps	for 500 ml	AAA23553	9	16	28	28	9	16
(Stainless steel)	for 1L	AAA23554	6	9	18	18	6	9
	for 2L	AAA23555	4	5	11	11	4	6
	for 2.8L	AAA23557	2	4	8	8	2	5
	for 4L	AAA23558	-	-	6	6	-	4
	for 6L	AAA23559	-	-	5	-	-	2
	Erlenmeyer flask s	size	Max. mountab	le flask clamps		-		-
	for 50 ml	AAA30570	36	49	88	88	36	49
	for 100 ~ 125 ml	AAA30571	19	29	48	48	19	29
Flask	for 200 ml	AAA30572	13	21	35	33	13	21
clamps	for 250 ml	AAA30573	13	19	35	33	13	19
(plastic)	for 300 ml	AAA30574	12	19	35	33	12	19
	for 500 ml	AAA30575	9	12	24	24	9	12
	for 1L	AAA30576	4	9	12	12	5	9
	for 2L	AAA30577	2	4	8	8	4	5
	separatory funnel	size	Max. mountab	le funnel clamps				
Francis	for 250 ml	AAA23562	4	6	15	15	4	6
Funnel clamps	for 500 ml	AAA23563	2	4	10	10	3	4
Gampa	for 1L	AAA23564	-	3	7	7	-	3
	for 2L	AAA23565	-	-	5	5	-	-

\* Above accessories need to be mounted on a universal platform which is sold separately.

## **Dedicated platforms**

When using a single flask size only, the dedicated platforms with pre-installed clamps provide maximum capacity. 250mL and 500mL clamps are standard but other sizes can be available.

Description	<b>IST-3075</b> (R)	IST-4075(R)	ISF-7100(R) ISF-7200(R)	ISS-7100(R) ISS-7200(R)	ISS-3075(R)	ISS-4075(R)
Universal platform &250mL flask clamps	AAA23611-V1	AAA23623-V1	AAA23634	AAA23637	AAA23611-V1	AAA23621-V1
No. of flask clamps	14	20	39	39	14	20
Universal platform &500mL flask clamps	AAA23612-V1	AAA23622-V1	AAA23635	AAA23636	AAA23612-V1	AAA23622-V1
No. of flask clamps	9	16	28	28	9	16

\* A dedicated platform is sold with setting each max. mountable amount of flask clamps on.

## **Accessories & Options**

### for Incubated Shakers



Test tube racks



### Test tube racks

Easy to release and mount racks made of durable stainless steel with adjustable angle and tube height support. Test tube racks are used with an optional universal platform.

Description		<b>IST-3075</b> (R)	<b>IST-4075</b> (R)	ISF-7100(R) ISF-7200(R)	ISS-7100(R) ISS-7200(R)	ISS-3075(R)	ISS-4075(R)
Universal platform		AAA23501-V3	AAA23502-V3	AAA23053-V3	AAA23503-V4	AAA31501-V3	AAA23502-V3
Test tube size		Mountable cap	acity of rack*				
for 86 test tubes, ø8mm / ø0.3"	AAA23581						
for 86 test tubes, Ø10mm / Ø0.4"	AAA23582	]					
for 58 test tubes, ø12mm / ø0.5"	AAA23583	]					
for 58 test tubes, ø14mm / ø0.6"	AAA23584						
for 32 test tubes, Ø17mm / Ø0.7	AAA23585	2	4	7	7	2	4
for 19 test tubes, ø25mm / ø1.0"	AAA23586	]					
for 10 test tubes, ø30mm / ø1.2"	AAA23587						
for 10 test tubes, Ø35mm / Ø1.4"	AAA23594						
for 4 test tubes, ø50mm / ø1.9"	AAA23593						

\* No declination

\* We can manufacture other size of test tube racks to meet your specific requirements. Contact us for details.

## **Microplate holders**

Available in three styles: tower type, flat type (small and large), and single type. Tower type holder is for 10 standard or deep well plates. Large flat holder is for 4 standard or deep well plates. Small flat holder is for 3 standard or deep well plates. Single type holder is for 1 standard or deep well plates (standard well plates' height: 14.7mm)

Description		<b>IST-3075</b> (R)	<b>IST-407</b> 5(R)	ISF-7100(R) ISF-7200(R)	ISS-7100(R) ISS-7200(R)	ISS-3075(R)	ISS-4075(R)
Universal platform		AAA23501-V3	AAA23502-V3	AAA23053-V3	AAA23503-V4	AAA31501-V3	AAA23502-V3
Microplate holder type		Max. mountab	le microplate hol	ders			
Single	AAA23654	8	15	25	25	8	15
Tower	AAA23651	5	8	21	21	6	10
Flat A(large)	AAA23652	-	2	4	4	-	2
Flat B(small)	AAA23653	2	2	6	6	2	3

\* Microplate holders need to be mounted on an universal platform which is sold separately.

### **Rubber mats**

Designed for low-speed applications, non-skid rubber mats allow quick addition or removal of flasks, plates or tubes.

Description	<b>IST-3075</b> (R)	<b>IST-4075</b> (R)	ISF-7100(R) ISF-7200(R)	ISS-7100(R) ISS-7200(R)	ISS-3075(R)	ISS-4075(R)
Cat. No.	AAA23531	AAA23532	AAA23534	AAA23535	AAA31531	AAA31532

### Universal attachments (utility carriers)

Several adjustable clamping bars for quickly securing a variety of glassware or tubes on non-skid rubber mats. Suitable for flat-bottomed flasks of various sizes.

Description	IST-3075(R)	IST-4075(R)	ISF-7100(R) ISF-7200(R)	ISS-7100(R) ISS-7200(R)	ISS-3075(R)	ISS-4075(R)
Cat. No.	AAA23511-V1	AAA23512-V1	AAA23505	AAA23513	AAA23511-V1	AAA23512-V1









Spring wire racks Lab sticker (two tier rack with flexible crossed spring) (universal platform is optional)

Stand (stand 1 / stand 2)

Retractable foot caster

## Spring wire racks

Ideal for holding a wide variety of tubes, flasks, and other glassware. All components are made of stainless steel.

Description	IST-3075(R)	IST-4075(R)	ISF-7100(R) ISF-7200(R)	ISS-7100(R) ISS-7200(R)	ISS-3075(R)	ISS-4075(R)
Cat.No.	AAA23521-V1	AAA23522-V2	AAA23514	AAA23526	AAA31521-V1	AAA31522-V1
Erlenmeyer flask size	Max. inserting flas	ks	1	!		
for 50 mL	16	25	45	45	16	25
for 100 mL	9	16	28	28	9	16
for 250 mL	4	9	18	18	4	9
for 300 mL	4	9	18	18	4	9
for 500 mL	4	5	15	15	4	5
for 1L	2	4	10	10	2	4
for 2L	1	2	6	6	1	2
for 2.8L	1	2	4	4	1	2

## Lab sticker

An alternative method for securing vessels to a shaker platform. Ideal for containers such as bottles and dishes that cannot be held on the universal platform with conventional flask clamps. For safe operation, gradual RPM increase is recommended.

Cat. No.	Description (W×D×H) (mm / inch)
AAA30551	200×200×5 / 7.9×7.9×0.2

## Stands

Perfectly designed to let users feel totally relaxed by leveling the height.

Cat. No.	Description	Suitable for
AAA23571	Stand 1 with Stacking kits (600mm / 23.6" height for stacking 1 unit)	ISS-7100(R), ISS-7200(R)
AAA23572	Stand 2 with Stacking kits (300mm / 11.8" height for stacking 2 units)	

## Gateway

Establish Jeio Tech Network by Gateway. No computer use is required at all. Remote monitoring of operating status through a mobile device (Android only) is simply available when you place a Gateway in your laboratory. Maximum 4 units can be connected to Gateway by RS-232 cable.

Cat. No.	Description	Suitable for
AAAQ1011	Gateway (2.4GHz, 100~240V, 50/60Hz)	IL3 models IST, ISF, ISS models

## **Stacking kits**

Units are stackable using exclusive stacking kits for space saving.

Cat. No.	Description	Suitable for
AAA23573	Stacking kits for stackable chambers	ISS-7100(R), ISS-7200(R)
AAA23811	Stacking kits for stackable chambers	ISS-3075(R)
AAA23812	Stacking kits for stackable chambers	ISS-4075(R)

## **Retractable foot caster**

Highly beneficial for easy mobility during installation or relocation.

Cat. No.	Description	Suitable for
AAA23801	Retractable foot caster (700x733x145mm / 27.6x28.9x5.7")	ISS-3075(R)
AAA23802	Retractable foot caster (800x813x225mm / 31.5x32x8.9")	ISS-4075(R)





Gateway

Remote control through a mobile device (Android only)