



SCIENTIFIC

OPERATION

MANUAL

The BellyDancer[®]

115 Volt & 220 Volt

BDRAA115S | BDRAA220S

Important Safety Information!

- Please read this manual carefully before operating your new IBI Belly Dancer® Shaker.
- This manual contains important operating and safety information.
- To best use this product, please read the entire manual carefully prior to use.
- To avoid possible injury, this product should only be used for its intended purpose.

Package Contents | Unpacking

Upon receiving this product, please verify all of the noted parts and accessories are contained in this package. Awareness of the stated cautions and warnings contained within this manual, compliance with recommended operating parameters, and maintenance requirements are important for safe and satisfactory operation.

- The Belly Dancer® Shaker - 115V or 220V
- Platform Mat
- Power Cord
- Operation Manual

Save all packing material, and these instructions, if the shaker is received damaged. This shaker was carefully packaged and thoroughly inspected before leaving the factory. Responsibility for its safe delivery was assumed by the carrier upon acceptance of the shipment; therefore, claims for loss or damage sustained in transit must be made with the carrier.

⚠ Note: Carefully inspect all items in the package to insure no items are broken or missing. If there are items broken, please inspect the package carefully for signs of shipping damage. If there is ANY sign of shipping damage, please contact the carrier and file a claim with them immediately. Contact the distributor from which you purchased the item or IBI Scientific directly for assistance at (800) 253-4942 or (563) 690-0484.

Product Specifications

Unit Dimensions: 9"(h) x 15"(w) x 15"(l)

Platform Dimensions: 12"(w) x 12"(l)

Unit Weight: 16lbs

Maximum Load: 20lbs

Orbit Size: 1"

Operation Speed: 0 - 100RPM

Platform Pitch Angle: 0 - 8°

Operation Temperature: 0° - 40°C (Unit can be operated in CO₂ incubator w/95% non-condensing humidity)

Electrical (BDRAA115S): Voltage: 115V Power: 70W Fuse: 630mA

Electrical (BDRAA220S): Voltage: 230V Power: 70W Fuse: 315mA

Installation

Location

The Belly Dancer® is designed to operate in a reasonable, but limited, range of temperatures and conditions. It can be used in incubated and refrigerated environments, as well as ambient laboratory conditions. The operating temperature range of this unit is 0° - 40°C, and it will successfully operate in non-condensing humidity environments of up to 95% humidity.

⚠ Warning: Operate this unit in temperature conditions between 0° and 40°C, and in less than 95% non-condensing humidity environments.

Electrical Connections

For your personal safety, this unit must be properly grounded. The supplied power cord is equipped with a three-prong, grounded plug, that mates to a standard three-prong grounded wall receptacle. This is done to minimize the possibility of electric shock hazard from this unit. The user should also have the wall receptacle and circuit checked by a qualified electrician to ensure the receptacle is properly grounded prior to use. Where a two-prong wall receptacle is encountered, it is the responsibility of the user to have it replaced with a properly grounded three-prong wall receptacle.

Warning: Do not, under any circumstance, cut or remove the third ground prong from the supplied power cord. Also, do not use a three-to-two prong adaptor plug.

Determine the total amount of current presently being used by other apparatus connected to the circuit that will be used by this shaker. The typical current demand for 115V Belly Dancer® units is approximately 0.5Amps, and for 220V Belly Dancer® units is approximately 0.3Amps. It is critical that this added current demand, & other equipment connected to the circuit not exceed the rating of the line fuse or circuit breaker.

Fuse

The fuse that is supplied with the Belly Dancer® units is a 5 x 20mm Slo-Blo format. The supplied fuse rating for 115V Belly Dancer® units is 630mA, and the supplied fuse rating for 220V Belly Dancer® units 315mA. Should the fuse blow, replace with a new fuse of the same value. A replacement fuse is included inside the fuse holder from the factory.

Warning: Be sure the input voltage is of the same voltage as specified on the specplate, located on the back panel of the shaker.

Fuse Holder



Transport

Always unplug the power cord from the wall receptacle prior to moving the shaker. When moving the Belly Dancer® unit from one location to another, lift and carry the shaker by grasping underneath the base of the unit. Do NOT lift or carry the unit by means of the acrylic top! Carrying the shaker by the acrylic top may cause serious damage to the shaker and void the warranty.

Warning: Do not lift your Belly Dancer shaker by the acrylic platform!

Operation

Your new Belly Dancer® shaker is shipped fully assembled and ready for use. Prior to plugging the Belly Dancer® power cord into a power source, please see the following two steps:

- Turn the brass collar of the tilt control assembly counter-clockwise, all the way in for maximum tilt platform position. Then rotate the tilt control assembly back to the desired position for running. The shaker is shipped with the tilt control in the level position.
- Make sure the power is OFF by turning the speed control clockwise, then counter-clockwise until you hear the on/off click of the switch.

To properly break-in the shaker, plug the power cord into the wall receptacle and run the shaker for 1 to 2 hours at half speed, with the speed control dial at roughly the 12 o'clock position.

Platform Tilt Adjustment

The Belly Dancer® shaker is shipped with the tilt control fully extended, which causes the platform to orbit in a level position while running. To adjust the tilt of the platform for the unique, undulating motion of the Belly Dancer®, adjust the tilt assembly brass collar, located beneath the platform, by turning the brass collar in a counter-clockwise manner. To achieve maximum tilt of the platform, adjust the collar all the way down. Experiment with the degree of tilt and speed that best suits your experiments and laboratory requirements.

Warning: Do not exceed the maximum load of 20lbs!



Platform

The standard platform that is supplied with the Belly Dancer® shaker is 12" x 12", and is made from 3/8" cast acrylic. It is extremely durable and is easily cleaned using a mild detergent and water. The platform is also supplied with a non-slip white mat, to help keep the items placed on the shaker platform from moving around during operation. An optional 2nd story platform, 18" x 18" extension platform, and finger mats (used for smaller tubes and vials), are all also available for purchase. Please see the Accessories and Replacement Parts section for additional details.

Applications

- Cell Culture Growth and Mixing: The Belly Dancer® has been shown to be superior when used in cell culture and tissue culture applications; especially when used with endothelial cells, human liver cells, neurons, and other sensitive cell growth applications. The undulating motion and slow speeds of the Belly Dancer® provide excellent growth conditions without the danger of shearing cells.
- Immunoprecipitation: The smooth agitation of the Belly Dancer®, as well as its ability to operate perfectly in a cold room makes it ideal for IP procedures.
- Protein Gel Staining and De-Staining: The undulating motion of the Belly Dancer® creates a unique wave action within the staining solution, that provides superior staining of the gels. The same motion is excellent for destaining gels as well.
- Filter Washing: The unique motion of the Belly Dancer® allows the cleaning of multiple filters in a single container, keeping the filter layers separated, as well as providing excellent reagent exchange and thorough cleaning.
- Blotting Procedures: Superior reagent exchange produces lower background on a typical blotting membrane.
- Misc. Mixing: With the addition of the platform finger mat, the Belly Dancer® will mix multiple tubes of various sizes for numerous procedures.

Note: The degradation of acrylic by solvents may result in substantial discoloration, cracking, warpage or etching of the electrophoresis unit. DO NOT apply any of the following solvents to the unit: benzene, xylene, toluene, chloroform, carbon tetrachloride, alcohol, phenol, ketones, or esters.



Troubleshooting

In the unlikely event a problem develops with your Belly Dancer® Shaker, do **NOT** attempt to perform any service on the unit without first contacting IBI SCIENTIFIC. Unauthorized servicing may void the warranty. IBI will readily supply information regarding trouble shooting minor issues upon request.

In any correspondence with IBI SCIENTIFIC concerning your Belly Dancer® Shaker please refer to the **MODEL NUMBER** and **SERIAL NUMBER**, located on the specplate on the rear plate of the unit.

Model Number
Serial Number



Should your shaker suddenly cease to operate, first make sure there is power to the circuit to which the shaker is connected. Secondly, check the fuse at the incoming power entry module. It is located in the drawer of the power entry module. Use a small screwdriver to pry the fuse drawer open, and inspect the fuse. A spare fuse is included with the unit from the factory in the event it requires replacing. Always replace a defective fuse with one of equal rating: 630mA slo-blo fuses for 115V units and 315mA slo-blo fuses for 230V units.

⚠ Warning: If the STATUS light does not illuminate when the power is turned on, one of the two situations is most likely the cause of the problem.



Maintenance Of Unit

- Care must be observed in the handling of this unit.
- Do **NOT** expose the unit to temperatures above 60°C
- Do **NOT** expose the unit to organic solvents
- Do **NOT** clean the unit with abrasive cleaners or cleaning aids.
- Use mild cleaning solution (dish soap recommended) for routine cleaning. For heavier dirt, hand wash with soft cloth. In most cases, a rinse in deionized water is sufficient to clean the unit.

Limited Warranty

Our limited warranty for all life science equipment is one (1) year to the original buyer only (nontransferable) from the original date of purchase.

Our limited warranty as noted above extends to the direct end user of IBI Scientific products only. This warranty is in lieu of all other warranties whether expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no situation shall IBI Scientific be liable for any incidental or consequential damages of any kind, even though IBI Scientific has been advised of the possibility of such damages arising out of, or resulting from, the products or the use or modification thereof or due to the breach of this warranty or any other obligation of IBI Scientific to the customer, whether based on contract, tort, or any other legal theory. In no such event shall IBI Scientific be liable for damages which exceed the purchase price of any products.

For further assistance contact IBI Scientific Technical Service at [\(800\) 253-4942](tel:8002534942), [\(563\) 690-0484](tel:5636900484) or visit us on the web at ibisci.com

Accessories | Replacement Parts

Belly Dancer® Accessories

<u>Catalog #</u>	<u>Description</u>
ACCAA0001	Belly Dancer® 2nd Story Platform Kit - 12" x 12"
ACCAA0002	Belly Dancer® Nesting Platform Kit - 18" x 18"
ACCAA0003	Belly Dancer® Urethane Tube Mat (for multiple size tubes)
ACCAA0004	Belly Dancer® Non-Skid Silicone Mat - 12" x 12"

Belly Dancer® Startup Kits

<u>Catalog #</u>	<u>Description</u>
BDRLS0001	Belly Dancer® - 115V Unit w/2nd Story Platform Kit
BDRLS0002	Belly Dancer® - 115V Unit w/Nesting Platform Kit
BDRLS0003	Belly Dancer® - 115V Unit w/Urethane Tube Mat
BDRLS0004	Belly Dancer® - 220V Unit w/2nd Story Platform Kit
BDRLS0005	Belly Dancer® - 220V Unit w/Nesting Platform Kit
BDRLS0006	Belly Dancer® - 220V Unit w/Urethane Tube Mat

Belly Dancer® Replacement Parts

<u>Catalog #</u>	<u>Description</u>
ACCBD0001	Replacement Motor Coupler - Rubber
ACCF0001	Replacement Fuse (115V Models) - 630mA
ACCLG0002	Replacement Leg Kit
BDRTA0001	Replacement Tilt Assembly
BDRWH0001	Replacement Wire Harness (Includes Potentiometer)
COMBD0003	Replacement P.C. Board
COMCD0002	Replacement Flat Power Cord - 115V
COMCD0004	Replacement Power Cord - 220V (European)
COMCD0005	Replacement Power Cord - 220V (UK)
COMMT0002	Replacement Motor

Lab Start-Up Kits



BDRLS0001 | BDRLS0004

115V | 220V

Looking for a Belly Dancer®, but need more area for your samples? Check out this all-in-one kit that combines the Belly Dancer® shaker along with a second story platform! The second story platform is easy to install and instantly doubles the usable area of the Belly Dancer shaker. It uses 4 1/2" anodized aluminum spacers for maximum stability and platform uniformity. Each platform is also supplied with a non-skid mat to hold samples in place while the shaker is in use. See IBI catalog number [BDRLS0001](#) for a 115V Belly Dancer® with the second story platform and [BDRLS0004](#) for a 220V Belly Dancer with the second story platform.



BDRLS0002 | BDRLS0005

115V | 220V

Looking for a Belly Dancer®, but need more area for your samples? Check out this all-in-one kit that combines the Belly Dancer® shaker along with a nesting platform! The 18" x 18" nesting platform is easy to install and increases the platform capacity by 225%! The nesting platform is supplied with a non-skid mat to hold samples in place while the shaker is in use. See IBI catalog number [BDRLS0002](#) for a 115V Belly Dancer® with the nesting platform and [BDRLS0005](#) for a 220V Belly Dancer with the nesting platform.



BDRLS0003 | BDRLS0006

115V | 220V

Looking for a Belly Dancer®, but need a way to hold your tubes and vials in place? Check out this all-in-one kit that combines the Belly Dancer® shaker along with a finger mat! The finger mat is constructed of urethane for years of dependable use, and simply installs on top of the Belly Dancer® platform. This combo is perfect for mixing tubes and vials up to 50ml in size! See IBI catalog number [BDRLS0003](#) for a 115V Belly Dancer® with the finger mat and [BDRLS0006](#) for a 220V Belly Dancer with the finger mat.



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