



LABTIE DISPENSER INSTRUCTION MANUAL

Simple. Fast. Reliable.

Version 22.002



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About this Manual

This manual is your complete guide to the LabTIE Dispenser system for accurately dispensing Seeds, Beads and Powders in microplates, tubes, vials, petri dishes and trays. It covers package contents and assembly, step-by-step operating instructions for the Seed, Bead and Powder Dispenser, the cleaning and sterilization protocol, the containers each dispenser supports, spare parts and article numbers for re-ordering, and a short list of published research using LabTIE dispensers. For the complete LabTIE dispenser range, visit www.labtie.com/products.

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Introduction

LabTIE Dispensers are widely used to dispense Powders, Beads and Seeds accurately while speeding up your dispense process. Due to its modular design, it is able to dispense in all sorts of plates, tubes, vials and various trays. Exchangeable Metal Mesh plates enable you to dispense various amounts and weights of your solids.

Dispenser Limitations:

Type	Size or volume per well
Seeds	0.2mm – 9.0mm
Beads	0.3mm – 6.0mm (can be multiple beads per well)
Powders	1uL – 1500uL

Each Dispenser is designed, produced and tested by our own Tech Division and can be **custom made** to fit your requirements.



Cleaning and Sterilization Protocol

- 1) Wash all Dispenser components with **soap** and **water** for cleaning and to remove the antistatic charge.
- 2) Rinse with dH₂O (optional: Let it dry to the air).
- 3) Sterilize components by cleaning them with 70% EtOH, let the components dry to the air in a laminar/cross flow cabinet.

Important note!



DO NOT clean or sterilize the Dispenser and Converter with chemicals other than soap or Ethanol.

DO NOT Autoclave or place it in a dishwasher. This will damage the material.

Ordering and Technical Service

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Product Warranty

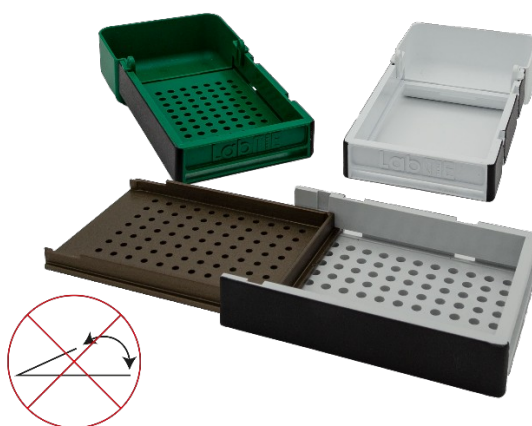
This warranty limits our liability to replacement of this product when product sustained incidental damage arising out of the use, the result of use, or inability to use this product. LabTIE will not take responsibility for damage on the product obtained through shipment and transport.

Assembly of the Dispenser

Product Videos and how to use the dispenser can be found at the specific Dispenser product page on www.labtie.com

The Metal Meshplate

- 1
 - a. Keep the Mesh plate between your fingers and slide it gently in the Main Unit
 - b. When the Mesh plate is in place, it will stick out a few mm



The Bucket

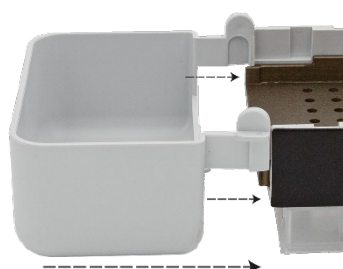
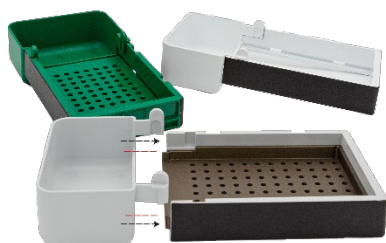
- 2
 - a. Align the Main Unit and the bucket horizontally. Make sure both are complete horizontally; If not, the Slide & Lock clips on the bucket will not fit!



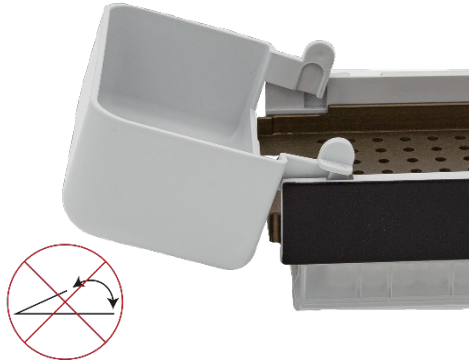
Before continuing, please study the photos below.

b. Grab the bucket in one hand and gently press the clips together with your thumb and finger; not too far to avoid breaking of the clips!

c. Move the bucket in a straight line to the Main unit and release the Slide & Lock clips, allowing them to lock in position

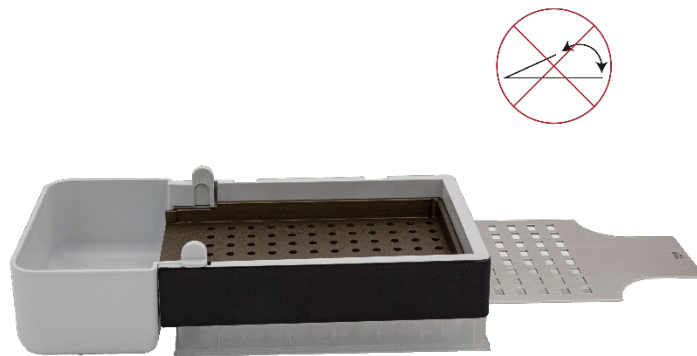


d. Do not tilt the bucket while assembling. This will create unwanted force on the joints or Slide & Lock clips



The Metal Slider

3. a. Slide the slider under the Mesh plate from the back of the Main Unit



The Converter

4.
 - a. Align the Main Unit above the Converter. Make sure the space for the bucket is on the correct side.
 - b. Push it down until it clicks into position. This may need to be done with some force to allow the white converter fingers to bend outward
 - b. To remove the Converter from the Main Unit, push the white converter fingers outward with 4 fingers so that the Main Unit can be removed



Assembly completed!



How to use

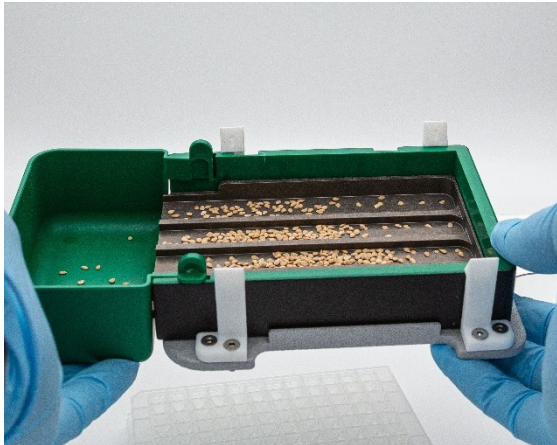
How to use the Seed Dispenser

Assemble the Dispenser.

Divide the seeds on the Mesh plate.

Hold the Dispenser with your fingers and shake horizontally back and forth. Only use the wrists while shaking and keep the arms still.

After a few seconds, tilt the Dispenser with the bucket down and keep shaking gently. As a result, all holes in the Mesh plate will be filled and the surplus of seeds will fall into the bucket.



Place the Dispenser on the plate, tray, vials etc. and carefully slide the Slider open 5mm to allow the seeds to drop.



Shake the Mesh plate gently 3 to 5 times with the back of the brush or your finger to help drop any remaining seeds. Check that all seeds have fallen. Remove the Dispenser.

How to use the Bead Dispenser

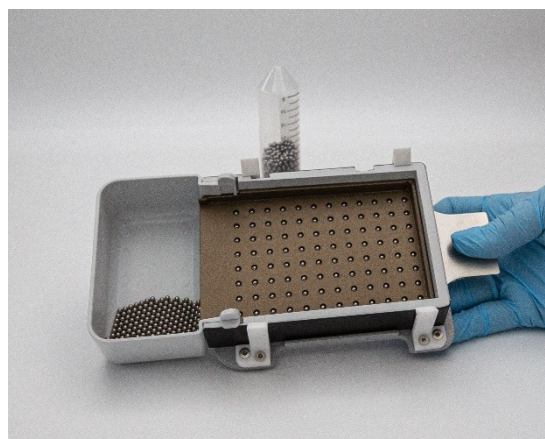
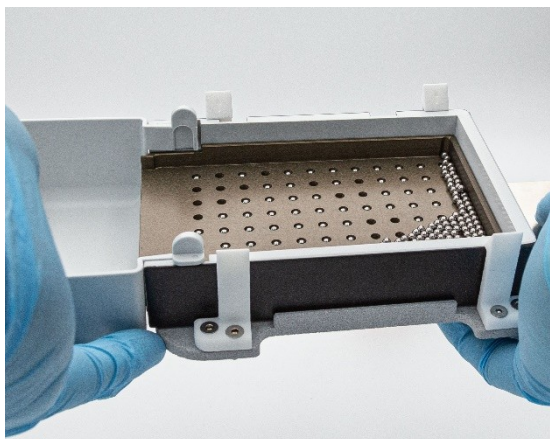


Assemble the Dispenser.

Divide the beads on the Mesh plate.

Hold the Dispenser with your fingers and shake horizontally back and forth. Only use the wrists while shaking and keep the arms still.

After a few seconds, tilt the Dispenser with the bucket down and keep shaking gently. As a result, all holes in the Mesh plate will be filled and the surplus of beads will fall into the bucket.



Place the Dispenser on the plate, tray, vials etc. and carefully slide the Slider open to allow the beads to drop.

Check that all beads have fallen; if necessary, pat the Main Unit gently to help drop any remaining beads.

Remove the Dispenser.

How to use the Powder Dispenser

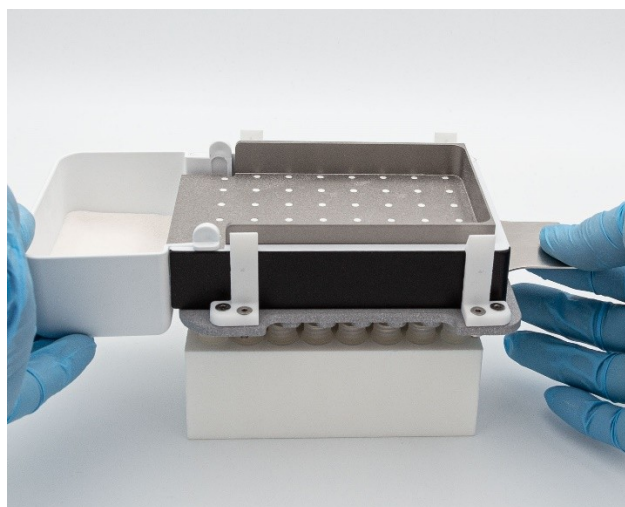
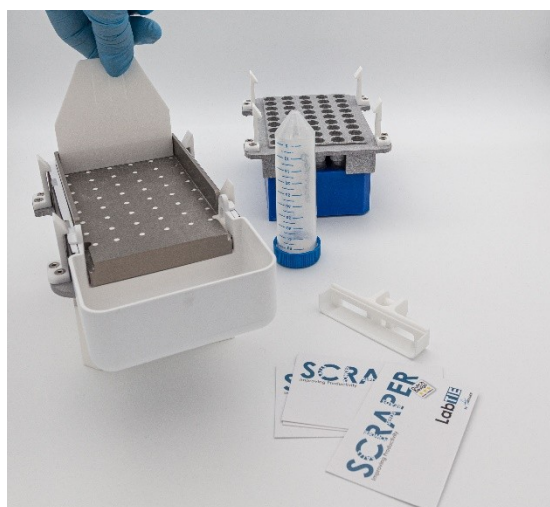


Assemble the Dispenser.

Place the Dispenser with Converter on the tubes, vials etc. and pour the powder onto the Mesh plate. Shake the Dispenser gently; the powder falls into the holes of the mesh plate.

Place the Dispenser back on the tubes, plate and gently wipe the excess powder into the bucket with the Powder Scraper or Scraper Cards. Note: Scraping too quickly can cause air pockets in the holes resulting in a difference of powder volume per hole.

Hold the scraper at a 90° angle to the Mesh plate to improve accuracy. A smaller angle pushes the powder into the holes, reducing accuracy.



Carefully slide open the Slider and let the powder fall. Check if all the powder has fallen; if not, tap gently with a brush or finger on the side of the Main Unit.

Remove the Dispenser.

Standard plates, tubes and trays supported by LabTIE Dispensers

Is your 'container' not listed? Dispenser can be customized to fit your 'container'

Microtiter and Cell Culture Plates



96-Well Microtiter, Cell Culture, Deep Well Plates and Plates with strips



384-Well Microtiter and Deep Well Plates



24-Well Greiner/Corning/ThermoF Plates

48-Well Greiner/Corning/ThermoF Plates

Tubes



Snap cap tube 0.2mL-1.5mL



Screw cap tube 1.5-2.0mL
Cryo Tube



1.5-2.0mL Autosample (GC)
Vials

Petri Dishes Round and Square



9cm and 10cm Agar/Blot paper

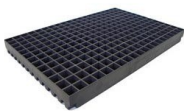


10cm and 12cm Agar/Blot paper

Trays



Germination Tray
Blot paper/Soil



108-Well Tray
Soil



Tray Soil 35 x 22 cm

Any questions? Feel free to contact us:

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Parts and Article Numbers

The table below lists the most commonly ordered LabTIE Dispenser components and their article numbers. Bead and Powder Mesh Plates are available in every standard well format across a range of bead sizes and powder volumes; see the matching LabTIE Bead Dispenser Brochure or Powder Dispenser Brochure for the full size chart, or contact us for a custom Mesh Plate.

Main Units, Buckets and Accessories

Component	Article Number
Dispenser Main Unit – Seed (green)	MGLT990036
Dispenser Main Unit – Bead (grey)	MGLT990037
Dispenser Main Unit – Powder (white)	MGLT990038
Dispenser Main Unit – generic (open)	MG0001548
Dispenser Bucket (green / grey / white)	MGLT990001 / 990002 / 990003
Dispenser Suitcase S	MGLT990025
Dispenser Suitcase L	MGLT990024
Dispenser Set Standard (complete kit)	MG0003060
Dispenser Set Starter	MG0003686
Dispenser User Manual	MGLT990026

Sliders (all standard well formats)

Component	Article Number
Slider 24-Well, Stainless Steel 316	MGLT9024
Slider 45-Well, Stainless Steel 316	MGLT9045
Slider 48-Well, Stainless Steel 316	MGLT9048
Slider 104-Well, Stainless Steel 316	MGLT9104
Slider 384-Well, Stainless Steel 316	MGLT9384
Slider Solid, Stainless Steel 316	MGLT9000
Slider (custom format)	MG0000473

Converters (most-requested formats)

Component	Article Number
Converter 24-well microtiter	MGLT60241
Converter 48-well microtiter	MGLT60481
Converter 48-well deep well	MGLT60482
Converter 96-well microtiter	MGLT60961
Converter 384-well plate	MGLT63841
Converter 24-well tube	MGLT60243
Converter 45-well tube	MGLT60453
Converter 48-well 2mL vial	MGLT60483
Converter 24-well GC vial	MGLT60244
Converter 100-well Cryovial 2mL	MGLT61003
Converter (custom, pyramid or straight)	MG0000470 / 0000471

To order, or for exchangeable Mesh Plates, custom Converters or Sliders not shown here, contact LabTIE International at info@labtie.com or +31 (0)6 11132028.



References

LabTIE Dispensers are used in published, peer-reviewed research across plant science, molecular biology and microbiology. A selection is listed below; a full literature review with the complete set of identified publications is available as a separate LabTIE reference document on request.

LabTIE Seed Dispenser

Lacey HJ et al. Nanangenines: drimane sesquiterpenoids as the dominant metabolite cohort of a novel Australian fungus, *Aspergillus nanangensis*. *Beilstein J Org Chem*. 2019;15:2631-2643. [View publication](#)

Li H et al. Hancockiamides: phenylpropanoid piperazines from *Aspergillus hancockii* are biosynthesised by a versatile dual single-module NRPS pathway. *Org Biomol Chem*. 2021;19:587-595. [View publication](#)

LabTIE Bead Dispenser

Cox SJ et al. High-Throughput Screening at the Membrane Interface Reveals Inhibitors of Amyloid- β . *Biochemistry*. 2020;59(24):2249-2258. [View publication](#)

Michaelis AC et al. The social and structural architecture of the yeast protein interactome. *Nature*. 2023;624:192-200. [View publication](#)

Nair VD et al. Protocol for high-throughput DNA methylation profiling in rat tissues using automated reduced representation bisulfite sequencing. *STAR Protocols*. 2024;5(2):103007. PMID 38691461. [View publication](#)

LabTIE Powder Dispenser

Epperson LE, Strong M. A scalable, efficient, and safe method to prepare high quality DNA from mycobacteria and other challenging cells. *J Clin Tuberc Other Mycobact Dis*. 2020;19:100150. [View publication](#)

Questions about a specific application or assay? Contact our technical team at info@labtie.com.