



Instruction Manual



Combines a **multi-function electronic counter** with a Sharpie® pen for marking to prevent missing or double-counting colonies

Patents USD564385

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Safety Precautions

The Colony Counter is designed for use in bioscience, medical, and chemistry laboratories. It may come in contact with biohazardous and/or hazardous materials. This instruction manual cannot address all safety hazards. It is the responsibility of the user to consult and observe all health and safety precautions and to assess the instrument's suitability to the task.

Warning!

Improper use of the counter or the battery such as short-circuiting, mechanical damage, or overheating, may cause an explosion.

1. Before operating, read this instruction manual.
2. Observe general laboratory safety precautions and regulations.
3. Do not immerse counter in water. Injury due to shock or fire may result.
4. For use with 11-12mm diameter permanent markers (Sharpie® fine and extra fine point pens recommended). Do not insert larger than 12mm diameter pen.
5. Follow all precautions from the Material Safety Data Sheet (MSDS) for any reagent you use with the counter.
6. Do not use solvent or flammable liquids near this or other electrical equipment.
7. Do not operate in a hazardous or flammable environment.
8. Do not use any solvent on the unit that may attack plastic.
9. Ensure the counter is protected from corrosion and mechanical damage. The counter must be cleaned with a pH-neutral cleaning liquid.
10. Always work in a manner which endangers neither the user nor any other person.
11. Use the counter only for counting, and within the recommended limits of its chemical resistance and mechanical properties.
12. Never use force when using this counter.
13. When not in use, store the counter on stand or in box.
14. Counter must only be used with a 3V CR1225 battery.
15. Follow safety procedures for Sharpie® pen use.
16. Batteries must be completely discharged before disposal.
17. Disposal should be performed in accordance with all governmental regulations.

18. Should the instrument fail to work to specification, immediately stop use. Clean and troubleshoot the instrument according to the instructions under “Maintenance” before any further use. Contact an authorized dealer or the manufacturer if trouble persists.
19. Repairs are to be performed by trained and authorized service personnel only. Contact Heathrow Scientific® LLC Repair Department/Technical Support.
20. Opening the instrument housing or improper use of the instrument voids the warranty. If there is a failure during the warranty period, contact Heathrow Scientific® LLC distributor for warranty service.
21. Do not use units that have not been correctly repaired.
22. Do not attempt to disassemble or modify.
23. Store at room temperature in a dry area. Do not expose to sunlight, moisture, or extreme temperatures for prolonged periods of time.

Technical Data

Pen:	Sharpie® fine and extra fine point pens recommended; accepts up to 12mm diameter permanent marker pens
Working temp:	32 to 122°F (0 to 50°C)
Battery:	One 3V CR1225 lithium battery
Housing material:	ABS

Warning!

This counter must not be used in an explosive atmosphere.

Disposal Responsibilities:

The equipment you purchased may contain hazardous substances that could impact the environment. Per regulations on electronic devices in the European Community, you must use the appropriate disposal systems to avoid exposure of these substances to the environment. The disposal systems will reuse or recycle hazardous materials from your equipment responsibly.

The crossed-out wheeled bin symbol invites you to use those systems.



If you need more information on the collection, reuse and recycling systems, please contact your local or regional waste administration. You can also contact us for more information on the environmental performance of our products.

Operation

Remove the contents from box, examining them carefully for breakage, defects, or shortages.

Getting Started

1. Slide off battery housing at the back end of the counter.
2. Insert a 3V CR1225 battery (included) with positive side facing up.
3. Slide on battery housing making sure it snaps into place.
4. Insert Sharpie® pen. Choose extra-fine or fine (included) tip pens based on preference. Change pen colors to confirm counts.



Counting Up/Down

1. Press power on/off button.
2. Up arrow will be displayed.
3. Press count up/down button to toggle between count directions. Select mode.
4. Mark each colony with Sharpie® pen. Make sure counter beeps each time a colony is marked. If colony is marked but no beep is heard, the count was not registered; press more firmly.
5. To reset counter, press on/off button.

NOTE: Counter will automatically turn off after 10 minutes of nonuse. Last counts will be stored in memory.



Select Alert Function

1. Unit automatically counts with an audible beep for verification.
2. Press alert button to toggle between audible beep or visual flash options. Select option.

NOTE: When on/off button is pushed, counter will again be in the audible beep mode.



Lock Counting Function

1. Press lock button; lock icon will be shown on display.
2. Write with Sharpie® pen without continuing to count.

NOTE: No other counter features will work when in the lock mode. Counter will automatically turn off after 10 minutes of nonuse. Last counts will be stored in memory.

3. Press lock button to count again; lock icon will disappear from display.
4. To reset counter, press on/off button.



Select Part Count Zone

1. Press part count zone button; zone number in upper left hand corner of display will increase by one and counter will be zero.
2. Mark each colony within zone, section of grid, different petri dishes, etc.
3. Press part count zone button to start new count.
4. Count all zones.

NOTE: Counter will count up to 32 different zones.



Select Sum Function

1. Press sum button; sum icon (Σ) will be shown on display.

NOTE: The sum will be of all part zones. No other counter features will work when in the sum mode. Counter will automatically turn off after 10 minutes of nonuse. Last counts will be stored in memory.

2. Write with Sharpie[®] pen without continuing to count.
3. Press sum button to count again; sum icon (Σ) will disappear from display.
4. To reset counter, press on/off button.

Hand Tally Adapter

The hand tally adapter is supplied with this product to permit counting without a pen.

1. Remove the pen from the counter and insert the Hand Tally Adapter into the pen opening.
2. Rotate the adapter to align the angled surfaces until it seats fully.
3. Grasp the product with the hand tally pointing upward so it can be pressed with the thumb.
4. Use the counting features as described elsewhere in this manual.

Storage

For benchtop storage, insert the counter and pen with cap into stand. Do not place near edge of benchtop.

Maintenance

The counter is normally maintenance-free. Clean unit only when necessary. The housing can be wiped using a damp cloth and a mild, non-corrosive detergent. Ensure all parts are thoroughly dry prior to operation.

Check Sharpie[®] pen prior to counting. If it does not mark, replace with new pen.

Replacing Battery

1. Slide off battery housing at the back end of the counter.
2. Insert a 3V CR1225 battery with positive side facing up.
3. Slide on battery housing making sure it snaps into place.

Return for Repair

Important:

Transporting hazardous materials without a permit is a violation of federal law.

Heathrow Scientific® LLC will not accept any counter that is not appropriately cleaned and decontaminated.

In the unlikely event of repair, or when damage to the unit necessitates return, contact Heathrow Scientific® LLC and obtain return authorization **before** sending your counter for service.

Warranty

Limited Warranty

Heathrow Scientific® LLC warrants that the colony counter will be free from defects in workmanship and material for 1 year from the date of purchase.

If you believe that there is a defect in the product, you must, during the warranty period, notify Heathrow Scientific® LLC, provide proof of purchase, and return the product to Heathrow Scientific® LLC with a Return Authorization form. To obtain a Return Authorization form, please call 1-847-816-5070. If Heathrow Scientific® LLC is properly notified and, after inspection, confirms that there is a defect and the warranty period has not expired, Heathrow Scientific® LLC will repair, modify, or replace the product, at its sole option, at no charge.

OTHER THAN THIS LIMITED WARRANTY, HEATHROW SCIENTIFIC® LLC MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE QUALITY OR PERFORMANCE OF THE PRODUCT, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE WHICH ARE HEREBY DISCLAIMED AND EXCLUDED. HEATHROW SCIENTIFIC® LLC WILL IN NO EVENT BE LIABLE FOR ANY LOSS OF USE, LOSS OF PROFITS, CONSEQUENTIAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES.

THIS WARRANTY DOES NOT COVER:

- ANY DEFECT OR DAMAGE CAUSED BY IMPROPER OR UNREASONABLE USE OF THE PRODUCT. (THE COLONY COUNTER IS DESIGNED FOR USE ONLY BY TRAINED LABORATORY TECHNICIANS. USE BY ANYONE ELSE WILL VOID THIS WARRANTY.)
- ANY PRODUCT THAT HAS BEEN, IN HEATHROW SCIENTIFIC® LLC'S SOLE JUDGEMENT, TAMPERED WITH, ALTERED, OR REPAIRED BY ANYONE OTHER THAN HEATHROW SCIENTIFIC® LLC.
- ANY PRODUCT THAT IS INOPERATIVE BECAUSE OF: (a) WEAR OCCASIONED BY USE, (b) NEGLIGENCE, (c) ACCIDENT, (d) INCORRECT MAINTENANCE, OR (e) USE UNDER ABNORMAL CONDITIONS OF TEMPERATURE, DIRT OR CORROSION, OR USE WITH ABRASIVE OR CORROSIVE MATERIALS.
- ACCESSORY PARTS, SUCH AS RUBBER PARTS, THAT ARE DAMAGED BY LIQUIDS OR MISUSE.

IN NO EVENT WILL HEATHROW SCIENTIFIC® LLC'S OBLIGATION UNDER THIS WARRANTY EXCEED THE PRICE OF THE PRODUCT.

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