

# Ideal MICRO-DRILL



WARNING: For research use only. Not for use on humans. The Ideal Micro-Drill™ is designed for research applications that require burrs and trephines. The drill is constructed of light-weight aluminum alloy for balance and control and is powered by a rechargeable 6-volt nickel-metal hydride (NiMH) battery. Under normal operating conditions and with intermittent use, the unit will work for up to 8 hours on a full charge.

## Operating Instructions

### Charging the battery

- Your **Ideal Micro-Drill™** should only be charged using the supplied charger. The use of any other charger may damage the battery and void the warranty.
- To charge the drill, plug the charger in an electrical outlet and insert the charger cord into the slot in the bottom of the drill. After connecting the charger to the drill, the LED indicator of the charger will display a flashing green light while the charger checks the battery. After a few seconds, the indicator will change to continuous red and charging will begin. The LED will change to continuous green when the charging cycle is complete.
- If the green LED indicator light does not stop flashing, the battery may be defective. Please contact CellPoint Scientific, Inc for repair.
- It is not necessary to wait until the battery is fully discharged to charge the drill. This will not harm the battery and charging the drill before long periods of work will help avoid running out of power.
- Charging may take up to 3 hours for a fully discharged battery. Less time is needed to fully charge the battery if it was not completely discharged.
- Do not operate the drill while the battery is being charged.
- Under normal operating conditions with intermittent use, the drill will work for up to 8 hours on a full charge. The drill will run for approximately 45 minutes if it is operated continuously.
- The battery should last up to 1000 charging cycles.
- While charging, the micro-drill may become warm to the touch. This is normal and will not damage the unit.
- Do not operate the drill while the batteries are being charged.
- Use the foam lined hard case to secure the drill during charging to prevent the start button from being accidentally pressed. Avoid accidental simultaneous charging and operation.

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**CAUTION:** Do not leave the charger cord plugged into the drill when not charging as this may drain the battery.

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**WARNING:** The battery in this drill may explode if exposed to fire or extreme heat. Discharge the battery and recycle the drill with electronic equipment containing batteries.

### Inserting and changing burrs

- The **Ideal Micro-Drill™** uses burrs with 2.33 mm shaft diameter.
- No additional tools are necessary to change burrs. Simply push the burr in the opening at the tip of the drill to install the burr. When the burr is inserted correctly, the tip of the burr should protrude approximately 15-20 mm from the drill.
- Avoid applying pressure on the burr head when inserting the burr in the drill. Do not push the burr against bench tops or other hard surfaces as they may deform the burr head.
- Should a tool be necessary to remove the burr, use a pair of fine pliers or hemostatic forceps to grasp the shaft underneath the burr head and carefully pull the burr out.

### Operating the drill

- To activate the micro-drill, hold it between the thumb and the forefinger. Allow the drill to rest on top of the hand. Depress the start button near the tip to start the drill.

- When drilling, material should be removed gradually allowing the burr to rotate freely without binding. Avoid applying excessive force. Dull or damaged burrs should be replaced. Do not rest the drill on the start button when it is not in use.

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## **Storage, cleaning and maintenance**

- Always store the micro-drill in the supplied hard case.
- Only clean the drill with a moist alcohol wipe.

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**WARNING: Do not attempt to autoclave your Ideal Micro-Drill™. Do not immerse in water.**

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**WARNING: The Ideal Micro-Drill™ has no user-serviceable parts. All repairs shall be performed by CellPoint Scientific, Inc. only. Any attempt to open the Ideal Micro Drill will void the warranty and could cause the battery to short circuit, which may result in overheating or explosion.**

## **Specifications**

- Length (Without Burr) 17.5 cm
- Diameter 1.9 cm
- Charger input 100-240 V
- No Load Speed 12,000 rpm
- Stall Torque 1.25 oz./in.
- Battery 6V 300 mAh NiMH rechargeable battery