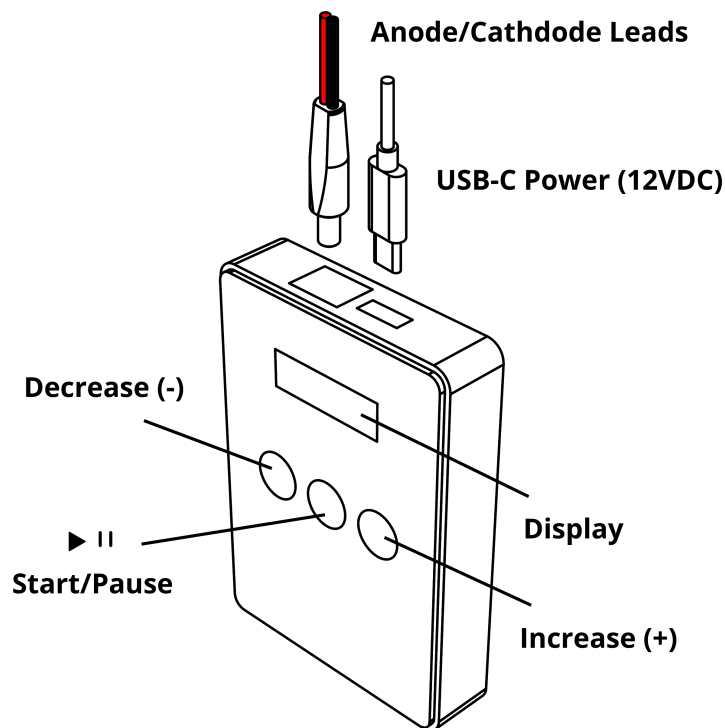


## Cu MiniForm

1 Amp Power Supply



Cu MiniForm Power Supply (rectifier) Specifications:  
Input (USB-C): 12VDC, 1.0A  
Output (5mm barrel type): 1-12VDC  
Adjustable Constant Current 0.1-1.0A (0.01A increments)

USB-C AC Wall Adapter Specifications:  
Input (US; Type A): 120VAC/60Hz (Typical)  
Output (USB Type A - USB Type C): 12VDC; 1.0A

### Set Up

Connect the red lead wire clip to the anode, and black lead wire clip to the cathode.

Plug in the provided USB-C AC wall adapter to power on.

Use the (+) and (-) buttons to adjust the output current.

Hold down the (▶ ||) button to power on and off.

**Prevent corrosion by avoiding solution droplets on the unit's surface, and unplugging the lead wires when not in use.**

### Features

#### Auto Regulated Voltage

With the Cu MiniForm, the only setting needed is the current; the voltage will adjust automatically.

#### MilliRamp

The Cu MiniForm offers a unique feature called the milliRamp, which improves the deposit of the initial layer of copper. The MiniForm will gradually increase the current over a short period until the set current level is reached. This will prevent over-plating of the suspension wire and initial copper layer while the early stages of plating are equalizing the surface resistance of the object.

If the USB-C AC wall adapter unit remains in place, powering down/on will save your last used amperage current, however the setting will behave as a new project, and the milliRamp feature will take effect.

To start a new project and reset the milliRamp feature, either leave the Cu MiniForm on pause mode for 5+ minutes, power on/off using the center start ( ▶ || ) button, or plug and replug the unit from the wall outlet.

### **Advanced "Super User" Mode**

To activate the advanced, or "Super User" mode, hold down the (-) and (+) buttons at the same time. This mode displays the voltage and current readouts, circuit resistance (ohms), and if the circuit is open or closed.

The voltage readout is real-time and will fluctuate rapidly. This is normal, as voltage will self regulate based on the current settings and the bath's resistance.

Use the (-) and (+) buttons to adjust the current as normal.

To exit this mode, hold down the (-) and (+) buttons at the same time once more.

## **Troubleshooting**

### **Connection Error Message**

The Cu MiniForm will display the error message "Reposition the Clips/Connection is Broken" when an open connection is detected in the circuit. This error message is commonly caused by a superficial connection between a conductive busbar and the suspension wire, or if corrosion is present. Check that the lead wire clips are securely connected to the anode and cathode wires, and that the anode and cathodes are not touching. Scrub clean any corrosion present.

To maintain a good connection, keep the Cu MiniForm unit's surface, lead wire clips, anode, and especially the conductive bus bar and suspension wire free from corrosion, which can be caused by splashes, droplets, or prolonged proximity to the electroforming solution.

*Do not allow solution or liquid to get inside the unit.*

Only use bare copper for the cathode/suspension wire and anode. Do not use products that have a coating or anti-tarnishing film over the wire. This will block the current from flowing through the circuit and cause the error message to display. Many craft wires from hobby stores will have this coating.

### **Bad USB Type Error Message**

Included with the Cu MiniForm is a USB-C AC wall adapter that is compatible with the unit. Using a different type of USB wall adapter will result in the error message "Bad USB? Is this the original?", as only a USB-C type AC wall adapter can be used with the Cu MiniForm. The provided wall adapter conveniently features the Cu logo on the front for easy identification.

For troubleshooting on electroforming, consult the electroforming tutorial manual.

The Cu MiniForm was proudly designed and created in house, and everything  
but the discrete electronic components were manufactured and assembled in the USA  
Special thanks to Mike Smith of MicroDean Systems

See the full electroforming manual for further instructions on how to electroform using the Cu MiniForm:

**[Enchantedleaves.com/Electroforming-Tutorial](https://Enchantedleaves.com/Electroforming-Tutorial)**