

# Technic Conductivity Test Apparatus



# About the Conductivity Test Apparatus

The Conductivity Test Apparatus (CTA) is a simple device that works in conjunction with an ohm meter.

## CTA Benefits:

- Constant calibrated weight applied to test strip / slide
- Four calibrated probes to accurately measure resistivity (per ASTM D2739)
- Easy set up to Ohm meter for quick readings with consistent precision
- Gold plated Copper electrodes!



Weight: 5.7 lbs. (2590 grams)

Length: 9" (23 cm)

Width: 4" (10 cm)

Height: 3.75" (9.5 cm)

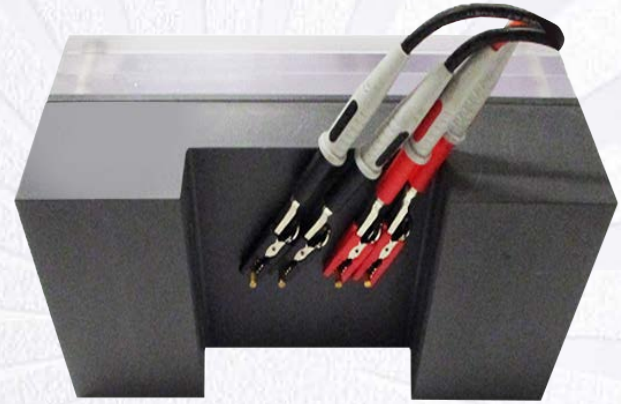
# Materials Needed

- Conductivity Test Apparatus (CTA)
- Calibrated weight (included)
- Slide with conductive paste/ink/adhesive
- Ohm meter (microcontroller) (not included)
- Set up on a level surface near an outlet



# Set Up

- Set up on a level surface near an outlet
  - This is to connect the Ohm meter
- Correctly hook up the four electrodes to the CTA and Ohm meter as seen in the pictures 1 and 2 to the right.

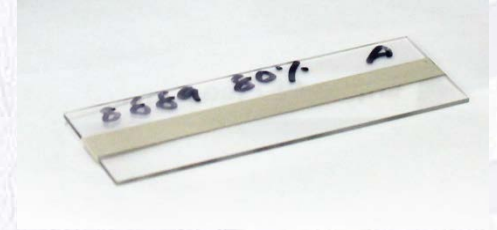


Picture 1: CTA electrode hook up example.



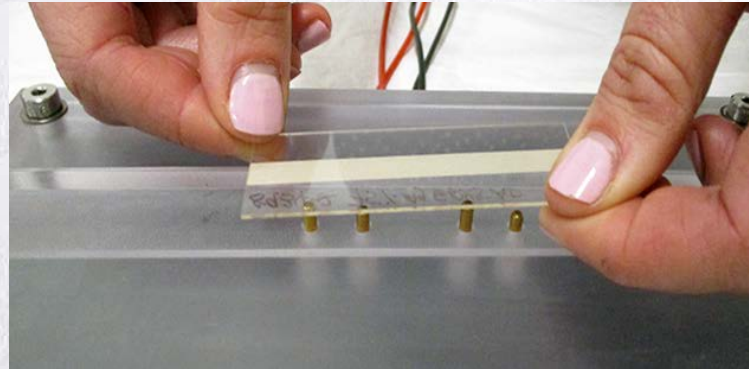
Picture 2: Ohm meter electrode hook up example.

## Set Up *Continued*



Picture 3: Example of testing slide with conductive silver paste on one side.

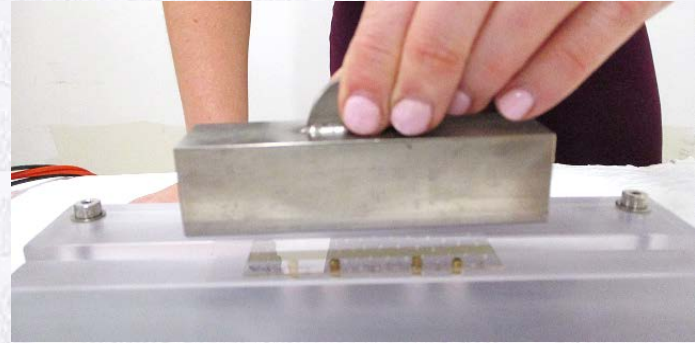
- Take testing slide (see picture 3) and place it on top of the four electrodes on top of the CTA (see picture 4).
- Jig is available for making test strip (please inquire)



Picture 4: Example of testing slide with conductive silver paste on one side.

## Set Up *Continued*

- Pick up weight seen in picture 5.
- Place weight directly on top of testing slide, seen in picture 6.



Picture 5: Weight



Picture 6: Weight on top of testing slide.

## Set Up *Continued*

- Read and record the resistivity on the Ohm meter.
- You can use this value to calculate the conductivity of your conductive test slide.



$$\text{Volume Resistivity} = \frac{\text{Resistance } (\Omega) \times \text{Thickness (mm)} \times \text{Width (mm)}}{\text{Distance Between Measuring Points (mm)}} .$$

# Contact us!

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