



Resistance code and Ohm's Law

PRESENTATION OF THE PROJECTX-FINAL LEVEL 1.



How did this approach

- ▶ Partnership with Telfax, where students can apply knowledge and making the maintenance of sensors in surveillance systems.



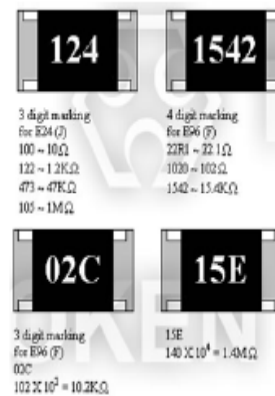
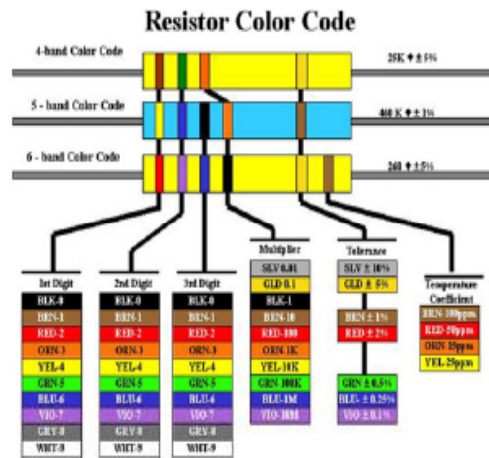
Chosen Approach

- ▶ Decoding Resistor Markings:
- ▶ Though they may not display their value outright, most resistors are marked to show what their resistance is PTH (Plated-Through-Hole) resistors use a color-coding system (which really adds some flair to circuits), and SMD (surface mount resistor) resistors have their own value-marking system.



Chosen approach

- ▶ Resistor code:
- ▶ Should apply the data table with the color code to indicate this value of resistances with exactitude. Students should have knowledge of the correct use of codes of resistance to achieve quickly resolve problems in the workplace.
- ▶ (difference in resistors).

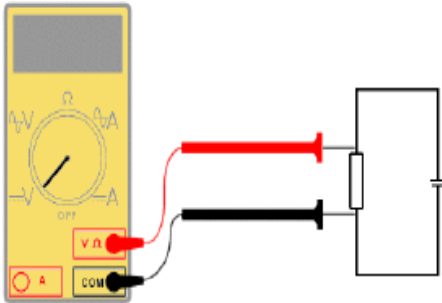


Chosen approach

- ▶ Must know how to use and properly handle the multimeter.
- ▶ The student has to pay special attention in the measurement of voltage and current as it requires correct handling

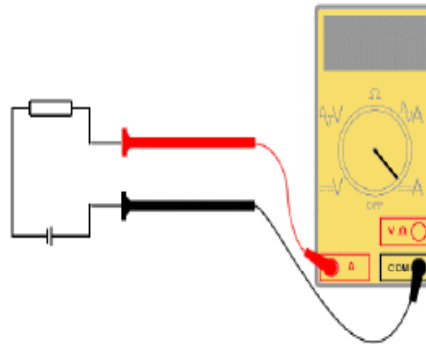
measure voltage

Always placed outside of circuit attached in parallel



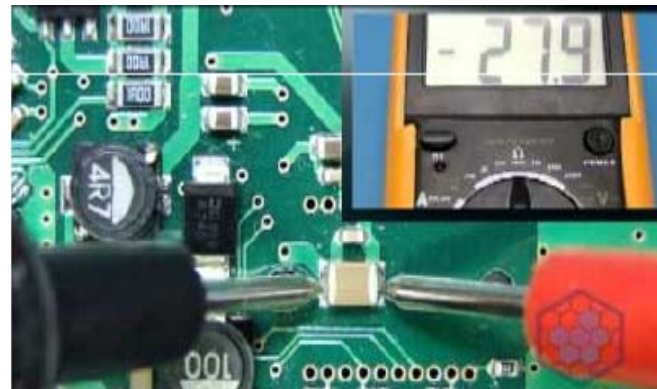
measure current

Always placed inside the circuit attached in series



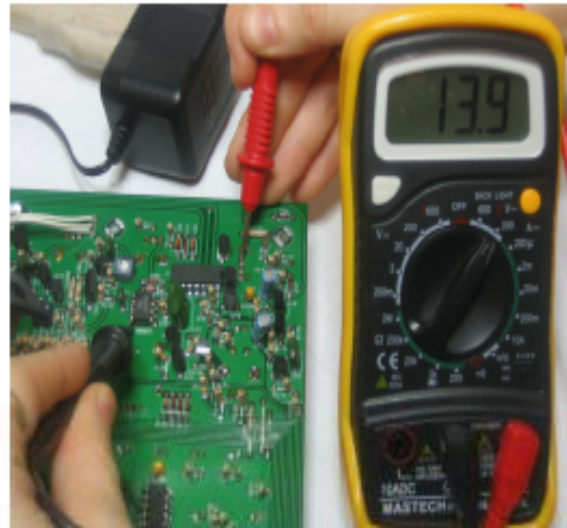
Chosen approach

- ▶ Understand the concept and application of the ohm law
- ▶ Whenever it is not possible to remove the component, the student must measure the voltage in a resistance after applying the theory of ohm's law



Learning Outcomes

1. Review and apply the code of resistances
2. Recognize the differentiation of various types of resistance
3. Know the differentiation between electrical current and voltage
4. Handle correctly measuring apparatus
5. Apply in practice the ohm's law



Objectives of the theoretical knowledge

1. Identify the main magnitudes of an electric circuit and its symbolism
2. Identify the various methods of measurement used in electronics
measurement of electrical current and voltage
3. Use correctly measure appliances Speak to apply ohm's law

Steps or activities to be performed by the student

- the theoretical practical application will be performed using the technique of simulated damage.
- the student should read the block diagram in order to divide the circuit for actuation zones.
- After discovering the fault must make the switch from reading the application component (code of resistors)
- In the repair of the damage should know use correctly the measurement devices.