

## **EXPERIMENT 5 THROUGH-HOLE SOLDERING KIT**

### **OBJECTIVE:**

The objective of this experiment is for students to learn the basics of through-hole soldering.

### **PROCEDURE:**

Students have a choice of one of three different through-hole soldering kits which will be completed during their regular laboratory session. Only one session should be necessary to complete the kit.

Students must purchase the kits prior to class and bring it with them to the laboratory session. Please take into account shipping times when making the order. All kits are available on Amazon.com though students may purchase them elsewhere if they wish. The kits are all approximately \$10-15.

Teaching assistants will explain and demonstrate the correct method for through-hole soldering. The grade for the assignment will be based upon the quality of student soldering and whether the device works when completed.

### **KITS:**

#### **3D Xmas Tree**

IS ICStation DIY 3D Xmas Tree Soldering Practice Electronic Science Assemble Kit 7  
Color Flashing LED PCB Solder Tool

[https://www.amazon.com/Tree-Assemble-Kit-Color-LED/dp/B06Y44CJ4B/ref=zg\\_bs\\_2528073011\\_46?\\_encoding=UTF8&psc=1&refRID=WFNQX015JHYFZX72NWM8](https://www.amazon.com/Tree-Assemble-Kit-Color-LED/dp/B06Y44CJ4B/ref=zg_bs_2528073011_46?_encoding=UTF8&psc=1&refRID=WFNQX015JHYFZX72NWM8)

#### **Piano**

Electronic Piano Soldering Kit (Intermediate Level) by Electronix Express

[https://www.amazon.com/Electronic-Soldering-Intermediate-Electronix-Express/dp/B072MHSW57/ref=zg\\_bs\\_2528073011\\_63?\\_encoding=UTF8&psc=1&refRID=S6W577JP98G8133V39YP](https://www.amazon.com/Electronic-Soldering-Intermediate-Electronix-Express/dp/B072MHSW57/ref=zg_bs_2528073011_63?_encoding=UTF8&psc=1&refRID=S6W577JP98G8133V39YP)

## Tesla Coil

Music Tesla Coil Plasma Speaker

[https://www.amazon.com/gp/product/B01N5F5N71/ref=ppx\\_yo\\_dt\\_b\\_search\\_asin\\_title?ie=UTF8&psc=1](https://www.amazon.com/gp/product/B01N5F5N71/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1)

Alternate: (the tested kit is not available in Amazon at this point)

[https://www.amazon.com/WINGONEER-Speaker-Loudspeaker-Wireless-Transmission/dp/B07FDWYFM2/ref=sr\\_1\\_2?keywords=Mini+Music+Tesla+Coil+Plasma+Speaker&qid=1566574412&s=electronics&sr=1-2](https://www.amazon.com/WINGONEER-Speaker-Loudspeaker-Wireless-Transmission/dp/B07FDWYFM2/ref=sr_1_2?keywords=Mini+Music+Tesla+Coil+Plasma+Speaker&qid=1566574412&s=electronics&sr=1-2)

**Youtube:** <https://www.youtube.com/watch?v=yOqXpuYTFso>