

EXPERIMENT 11 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

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

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

**Note: you will need a power cable with 15-24V DC, Current 2A, DC 5.5 interface to power it for testing. The one below or any similar one should work.

https://www.amazon.com/Inovat-100-240V-Switching-Adapter-Charger/dp/B01EG137I0/ref=pd_cp_23_1?pd_rd_w=ImxjC&pf_rd_p=ef4dc990-a9ca-4945-ae0b-f8d549198ed6&pf_rd_r=WZF6X2TJ4CZ0HFAFAW56&pd_rd_r=9f4b5c94-298c-4f4f-acal-ebaa1ccb8c71&pd_rd_wg=10t2q&pd_rd_i=B01EG137I0&psc=1&refRID=WZF6X2TJ4CZ0HFAFAW56

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