

TRIBALSTUDIOZ

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Learning Objectives

In this topic you will learn...

Soldering [Theory] (20mins)

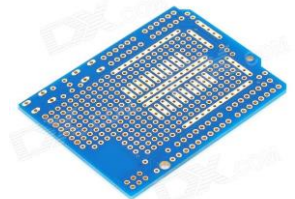
- What is soldering?
- How to solder?
- Using a soldering iron?

What is soldering?

Forms a permanent/improved connection between electronic components

Things required:

- Solder Iron
- Solder Lead
- PCB Board with exposed copper strip
- Electronic component



Parts of a solder iron



Iron Tip

The most important part of the iron

Heating Element

It is hot and will burn.
Never touch here.

Iron Handle

Safe to touch area.
Only hold/handle the iron with this part

Preparing the solder iron

- Turn on the iron and wait for the temperature to rise
 - Test the tip by feeding in the solder lead
 - When the solder lead melts, you may start to use the iron
- To protect the soldering tip, coat the tip with solder when not using



How to solder?

(Sequence done in 8-15 seconds)

- Clean the tip before using
- Heat the surface at the joint using the tip
 - Do not heat for too long (>10s)
- Melt-in the solder lead
 - Cover the area of the joint
 - Cover the component's leads
- Remove the solder iron
- Coat the tip with a layer of solder lead
- Return the iron to the stand/holder

Before we start, safety first.



Learning Objectives

In this topic you will learn...

Soldering [Practical]

40mins

- Examples of poor solder
- Common mistakes
- Video on Soldering

Learning Objectives

In this topic you will learn...

Soldering [Button + Tilt sensor]

60mins

- Schematic reading
- PCB Board and indicators