




# Adjustable Temperature Control Cheap T12 Soldering Iron

I love my T12 Hakko Clone Soldering iron. It's cost effective and usefull. This weekend I decided to make a cheaper clone version. First of all, I did a preliminary research on the internet and listed the most economical components that I could use.

 Difficulty **Medium**

 Duration **2 hour(s)**

 Categories **Electronics**

 Cost **25 USD (\$)**

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Comments

## Introduction

### 1. Plastic Enclosure

This project box only 3- USD and its very useful structure for lab bench application. [link](#)

### 2. Power Supply

I've used old notebook power supply 20V 3.25A. [link](#)

I recommended to you swap-meet(FleaMarket) or your personal scrap-box ;)

### 3. Power Plug

Standart IEC14 Chasis Mount.

### 4. Rocker Power Switch w/light.

### 5. Standart 16x2(16Charx2Row) datasheet

### 6. Double Sided PCB GERBER + BOM LIST + Arduino Software [link](#)

### 7. Plastic Knob or print its up to U.

### 8. 3D Printed Front and Back Panel on Thingiverse [link](#)

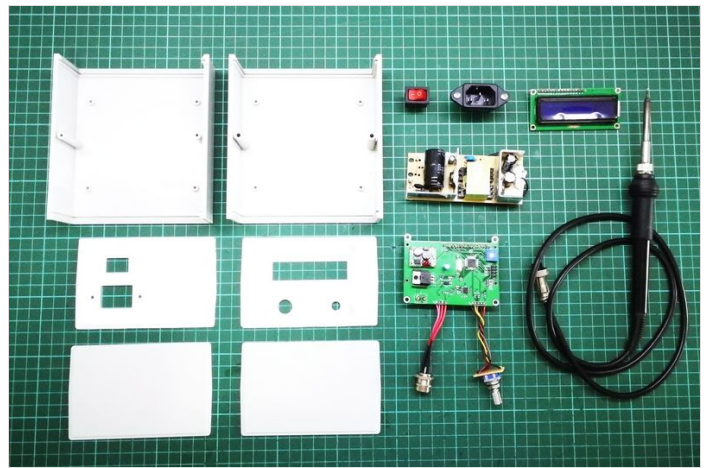
### 9. Encoder EC-11

### 10. GX12-5 MIC Avionics Connector.

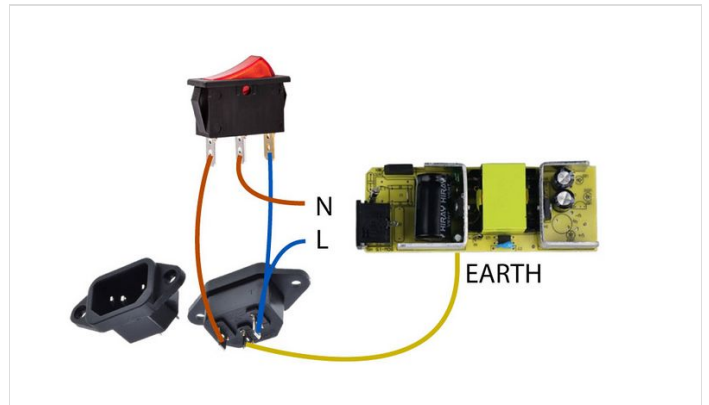
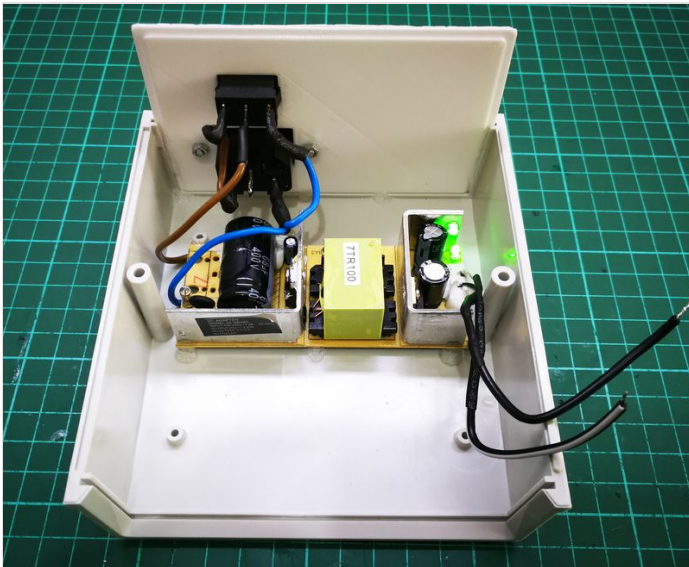
## Materials

## Tools

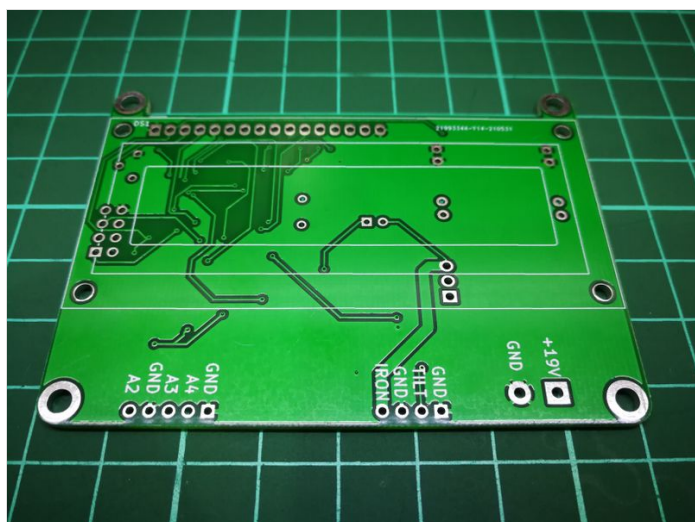
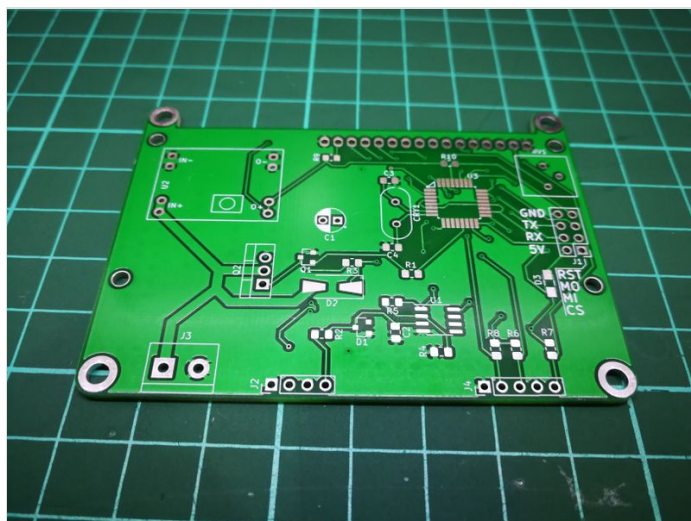
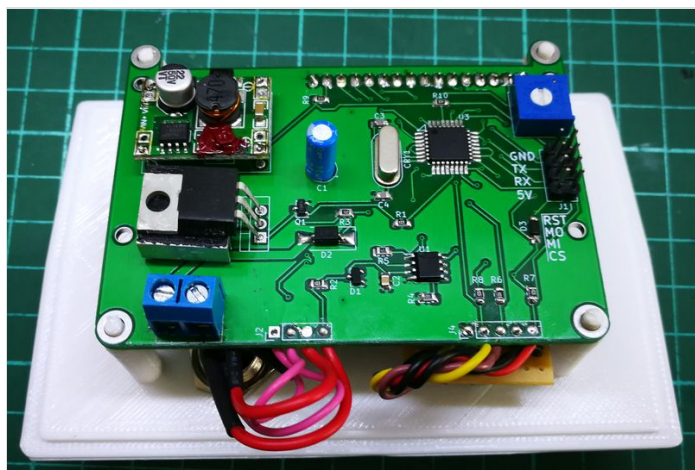
## Step 1 - Parts Introduction



## Step 2 - Power Side Assembly



## Step 3 - Controller Side Assembly PCBA



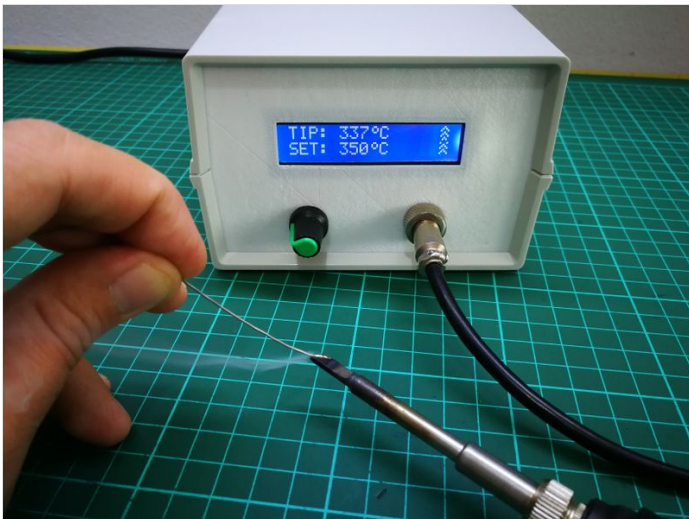
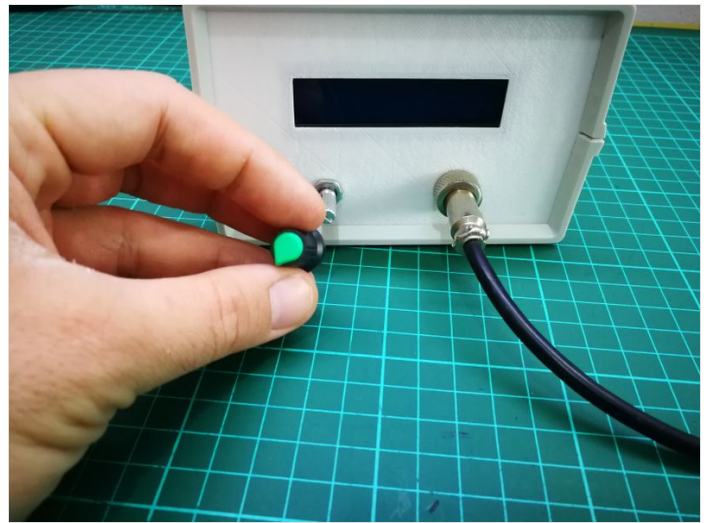
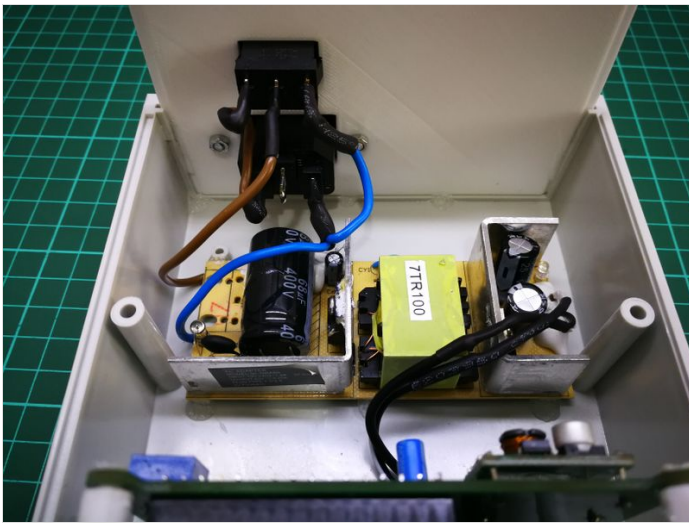
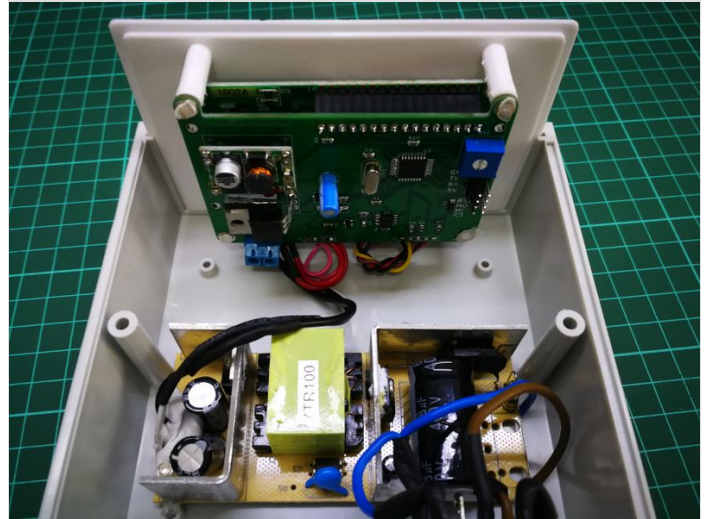
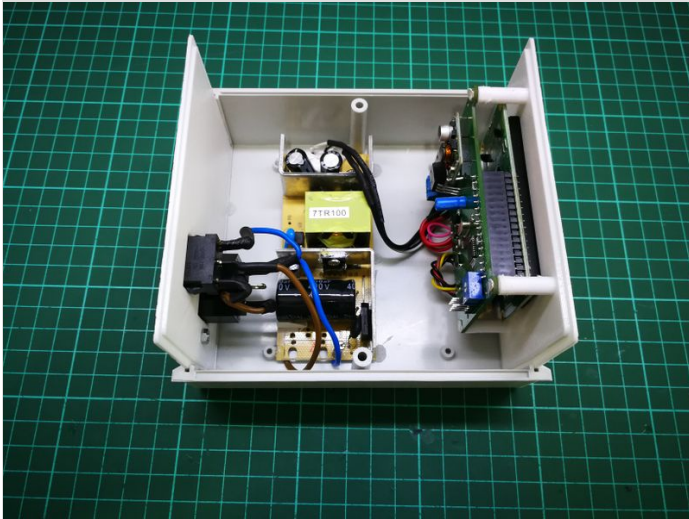
## Step 4 - Connector & Encoder Assembly





## Step 5 - Finalize

Youtube Test Video



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## Step 6 -

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## Notes and references

Hi! Can I have the princely scheme of the soldering station!