

# How to identify PNP and NPN Transistors (with a Simple Circuit) by RuiSantos



Author: RuiSantos Random Nerd Tutorials

Hi guys, My name is Rui Santos. Who am I? I'm a 19 years old student currently studying at FEUP Electrical Engineering. I'm Portuguese. I've created this account to share my electronics projects. If you guys enjoy my projects you can visit my website for more information. Or contact me by sending an email to rffsantos16 at gmail.com

## Intro: How to identify PNP and NPN Transistors (with a Simple Circuit)

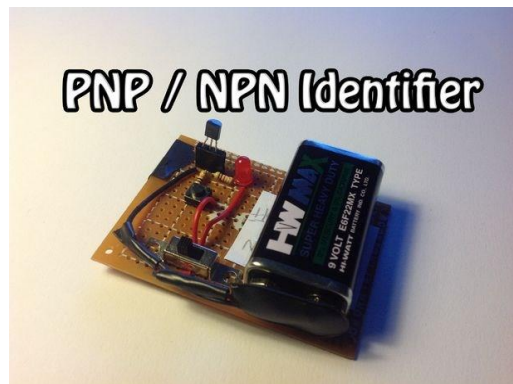
In this project I'll make one of the easiest PNP and NPN circuit identifiers ever. You'll see how easy it is to make one! I've also posted on my website a bit of the [theory about PNP and NPN Transistors](#) I would recommend you to read it first.

This project is great to learn more about:

- Transistors
- Simple DIY Circuits
- PNP and NPN Transistors

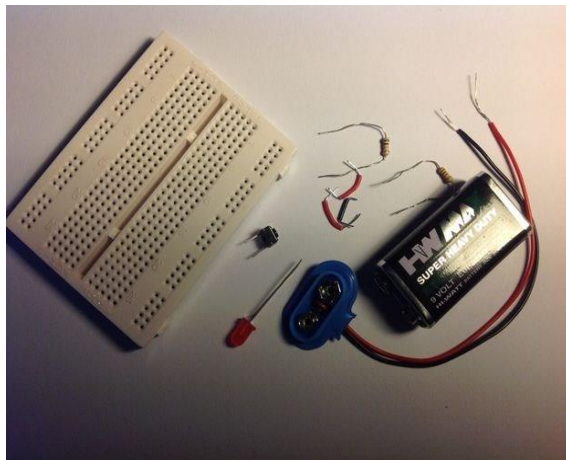
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If you just want to see my project working you can see this video:



## Step 1: Parts Required

1x LED  
1x Pushbutton  
1x 1k Ohm Resistor  
1x 10k Ohm Resistor  
1x Breadboard  
1x 9V Battery (and Battery Clip)  
Some Wires

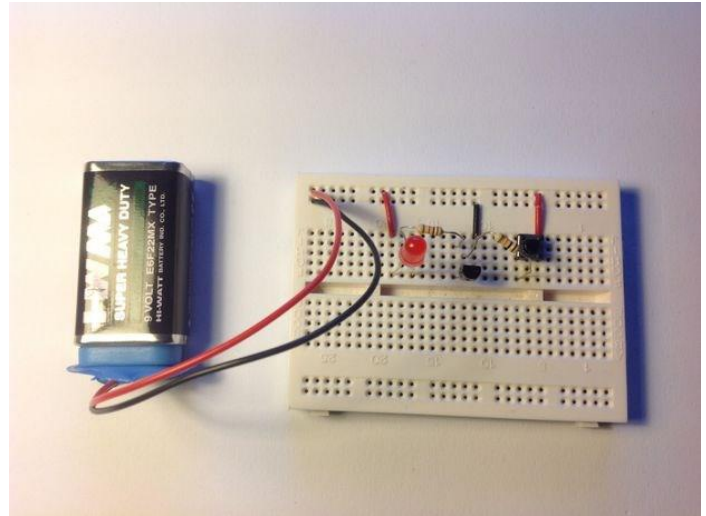
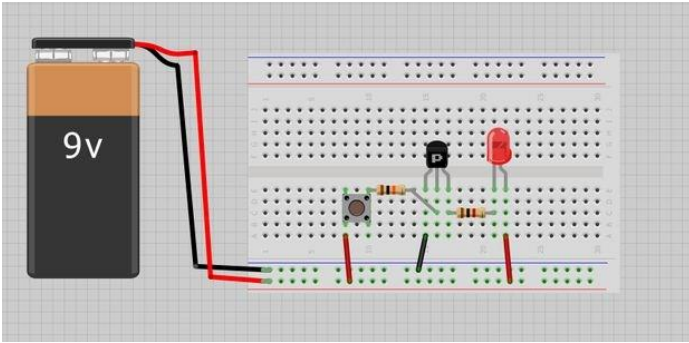


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## Step 2: Schematics

Just follow these Schematics and you'll be fine! :)



## Step 3: Optional Step

I've decided to Solder everything in a Stripboard and that's the result. This step is optional you might want to use only the breadboard.

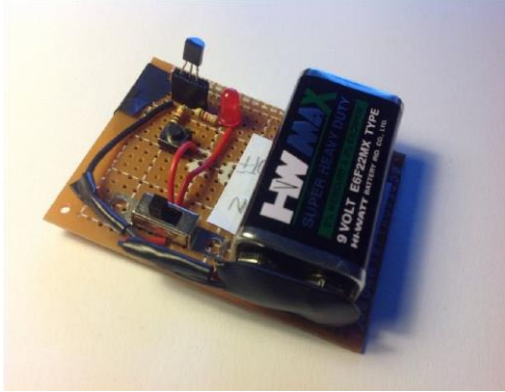


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#### Step 4: Final Product

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