# Soldering Key <https://learn.adafruit.com/adafruit-guide-excellent-soldering/common-problems>

* P **P**erfect
* TM **T**oo **m**uch solder
* NE **N**ot **e**nough solder
* CJ **C**old **j**oint
* H Too much **h**eat

**Component Placement Key**

* P **P**erfect
* IP **I**ncorrect orientation of **p**olarized component
* IN **I**nconsistent orientation of **n**on-polarized component (resistor tolerance bands)
* L **L**ead not trimmed flush with board
* F Part not **f**lush with board or the part is not seated perpendicular to board

**Rubric**

For each colored entry in the “Solder” columns of Table 1, inspect that solder connection and then fill in a code from the **Soldering Key**. Use P (perfect) only when all the solder connections to the component are perfect. Use multiple codes as needed.

For each colored entry in the “Comp” columns of Table 1, inspect the component placement and then fill in a code from the **Component Placement Key**. Use multiple codes as needed.

Table : PCB evaluation rubric. Fill in Solder, Comp columns using the keys provided. Grey cells are polarized components.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Blue | Solder | Comp | Green | Solder | Comp | Red | Solder | Comp |
| PWR JACK |  |  | R10/100 |  |  | R1/33k |  |  |
| ON/OFF |  |  | C12/10nF |  |  | R3/33k |  |  |
| C7/100uF |  |  | D3/1N4148 |  |  | C4/60nF |  |  |
| C8/10nF |  |  | D4/1N4148 |  |  | C5/60nF |  |  |
| LED1 |  |  | POT/BIAS |  |  | R4/15k |  |  |
| R5/10k |  |  | C13/100uF |  |  | R6/3.3k |  |  |
|  |  |  | T1/TIP32 |  |  | C1/60nF |  |  |
|  | | | T2/TIP31 |  |  | C2/60nF |  |  |
|  | | |  | | | R2/47k |  |  |
|  | | |  | | | R7/100k |  |  |
|  | | |  | | | C3/60nF |  |  |
|  | | |  | | | C6/60nF |  |  |
|  | | |  | | | POT/OFFSET |  |  |
|  | | |  | | | C9,60nF |  |  |
|  | | |  | | | AUDIO\_JACK |  |  |
|  | | |  | | | IC1/TLC274 |  |  |