

Puzzle Sounds

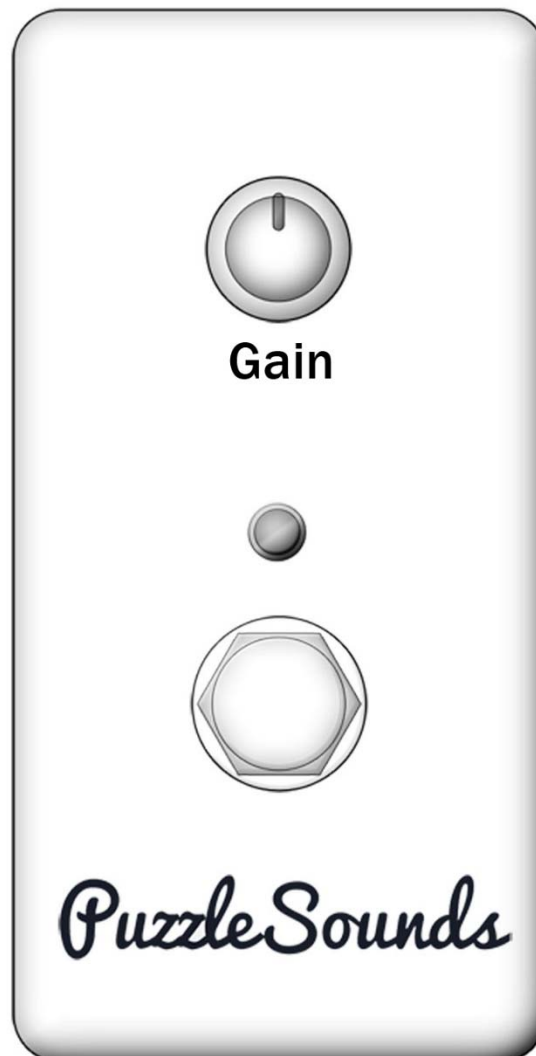
MICRO AMP



MICRO AMP

We hope you enjoy your new MICRO AMP! In this manual, you will find documentation and guidelines helpful to build either your Kit or PuzzleKit. For any further information, you can contact us via our website, www.puzzlesounds.com.

¡Esperamos que disfrutes de tu nuevo MICRO AMP! En este manual encontrarás la documentación e instrucciones para el montaje de tu Kit o PuzzleKit. Para cualquier información complementaria, puedes ponerte en contacto con nosotros a través de nuestra web, www.puzzlesounds.com.



MICRO AMP

Bill Of Materials

Resistors (9)

| | | |
|---|--------|------|
| 1 | R1 | 1.5M |
| 1 | R2 | 1k |
| 1 | R3 | 10M |
| 2 | R4, R5 | 100k |
| 1 | R6 | 120 |
| 1 | R7 | 2.4k |
| 1 | R8 | 56k |
| 1 | R9 | 470 |

Capacitors (6)

| | | |
|---|----|------------------------------------------|
| 1 | C1 | (not used, let it unconnected) |
| 1 | C2 | 100n |
| 1 | C3 | 1u (electro.) |
| 1 | C4 | 4.7u (electro., polarity doesn't matter) |
| 1 | C5 | 22u (electro.) |
| 1 | C6 | (not used, let it unconnected) |

Diodes (2)

| | | |
|---|--------|--------------------------------|
| 2 | D1, D2 | (not used, let it unconnected) |
|---|--------|--------------------------------|

Ics (1)

| | | |
|---|----|-------|
| 1 | U1 | TL071 |
|---|----|-------|

Potentiometers (1)

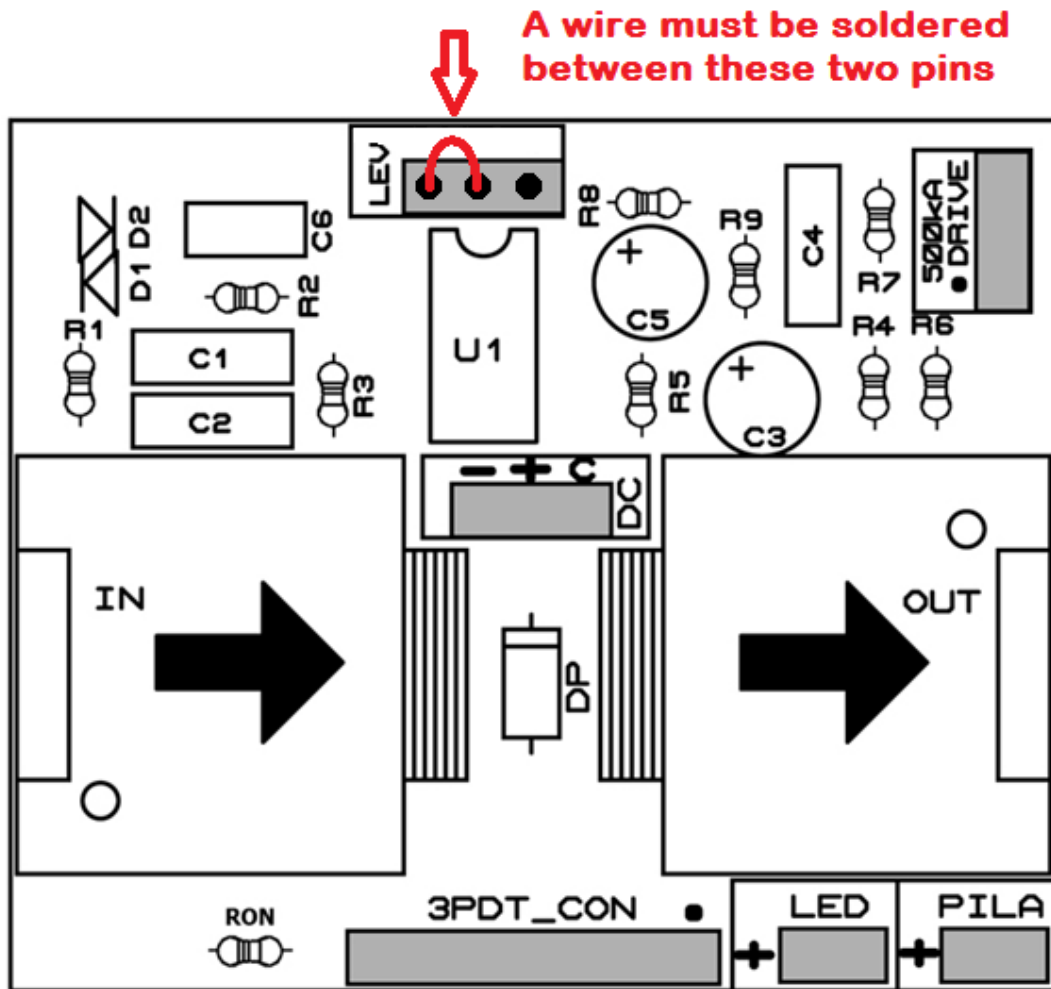
| | | |
|---|-------|--------------|
| 1 | DRIVE | 500kA (log.) |
|---|-------|--------------|

Other (2)

| | | |
|---|-----|--------|
| 1 | DP | 1N4007 |
| 1 | RON | 1k |

MICRO AMP

Parts Placement - Ubicación de componentes



INDEX

English Generic Building Manual



Manual Genérico de Construcción de un Kit

Puzzle Sounds

GENERIC MANUAL



Index

In this document you can find the building documents common to all the pedals, from how to wire the DC connector to how to assemble your PuzzleKit or tips for a better soldering.

- 1. PuzzleKit Building General Guidelines.**
- 2. Kit Building General Guidelines**

PuzzleKit Building General Guidelines



PuzzleKit General Guidelines

To watch the process of assembling a PuzzleKit, you can [check out the videotutorial in our website](#).

POTENTIOMETERS



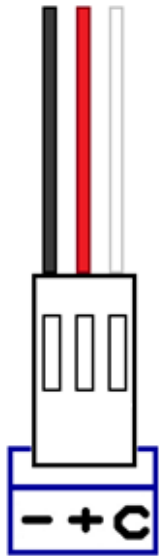
The different coloured wire designates the pin 1 of the potentiometer, and is connected to the dot in the PCB as shown in the picture.

The number and letter are the potentiometer value and type: A (logarithmic), B (linear), C (antilogarithmic) and W (log-antilog).

In this case, the Volume potentiometer would be an 100kA potentiometer.

NOTE: if any potentiometer is working opposed as it should (i.e., a volume potentiometer fading out when turning CW), you have probably connected it the other way around.

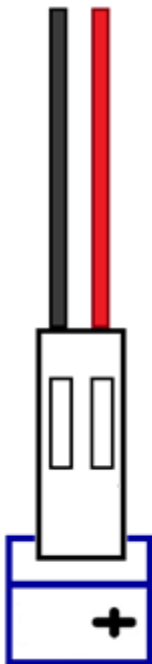
DC CONNECTOR



The connection of the DC Connector to the PCB is as follows:

- Black wire to the “-” in the PCB
- Red wire to the “+” in the PCB
- White wire to the “C” in the PCB

LED&BATTERY – LED&PILA



The connection of the LED to the PCB is as follows:

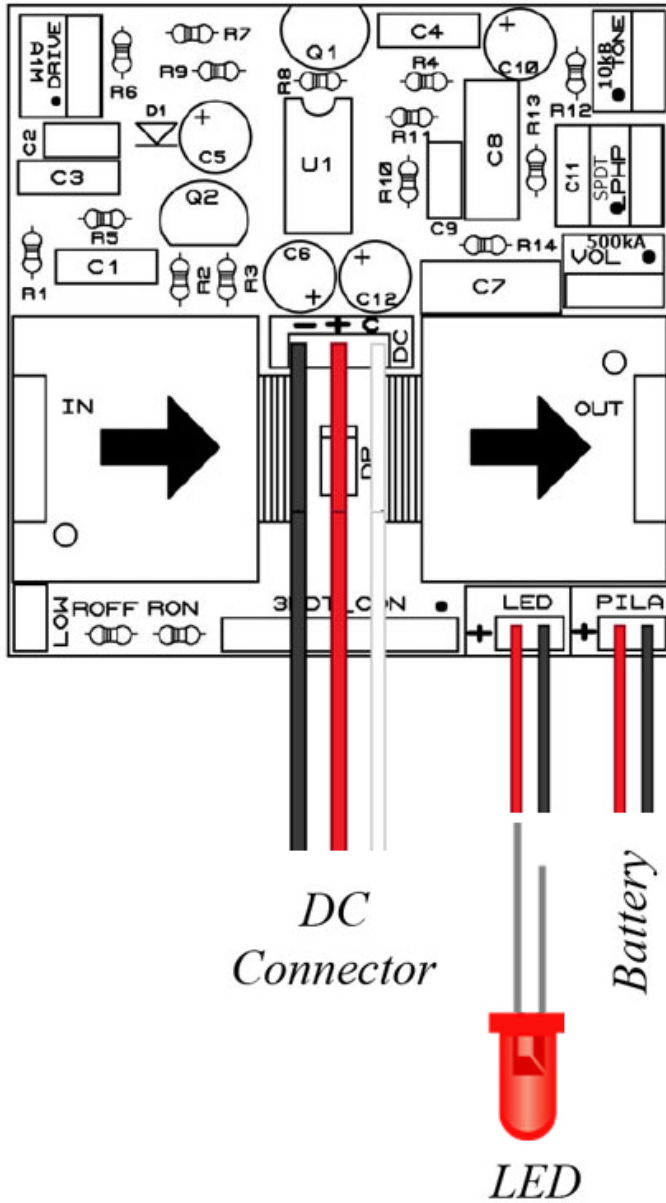
- Red wire to the “+” in the PCB connector (LED)

The connection of the battery to the PCB is as follows:

- Red wire to the “+” in the PCB connector (PILA)

DC, BATTERY&LED CONNECTION

Pay attention to the way the battery and DC jack are connected, as connecting them the wrong way could damage some of the parts.



Kit Building General Guidelines



Kit General Guidelines

For more detailed guidelines, you can check out the guide in our website: [Kit Assembly](#).

POTENTIOMETERS

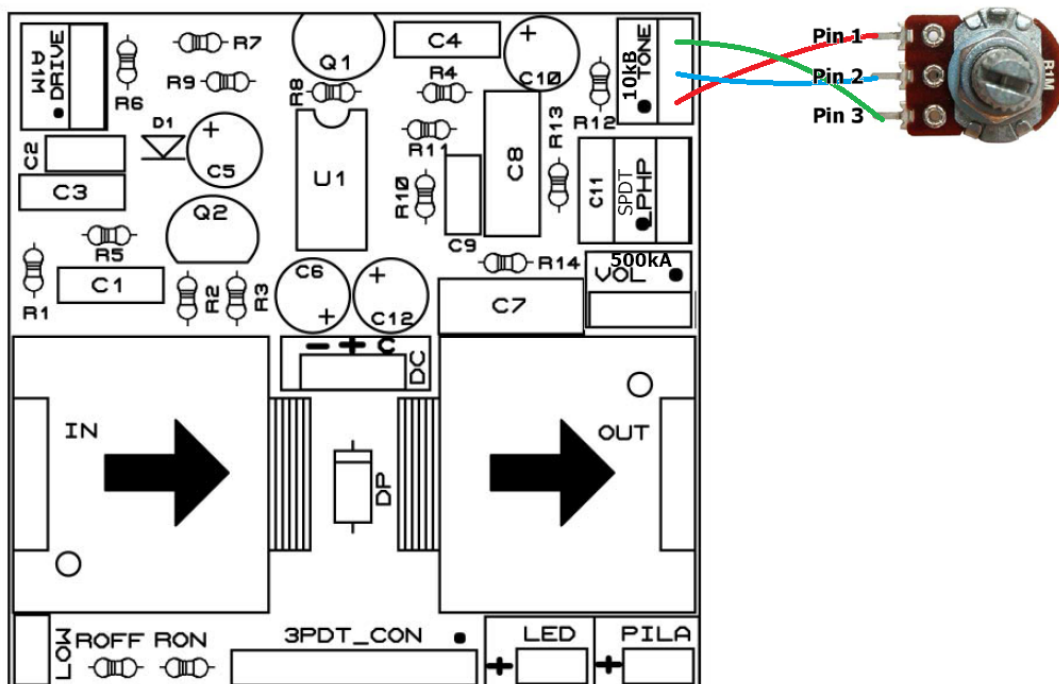


Pin 1
Pin 2
Pin 3

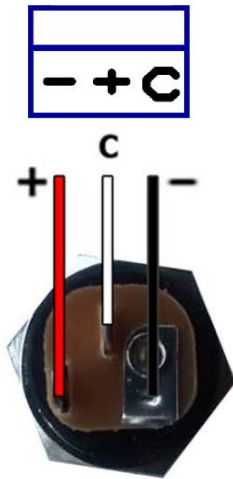


The potentiometer is wired to the PCB is as follows:

- Pin 1 to the dot in the PCB connector.
- Pin 2 to the middle in the PCB connector.
- Pin 3 to the last connector in the PCB.



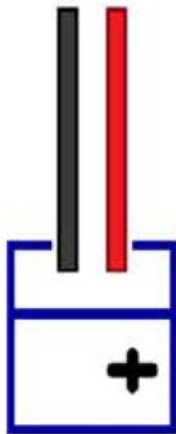
DC CONNECTOR



The DC connector is wired to the PCB is as follows:

- Pin 1 to the dot in the PCB connector
- Pin 2 to the middle in the PCB connector
- Pin 3 to the last connector in the PCB

BATTERY CLIP



The battery clip is wired to the PCB is as follows:

- Red wire to the “+” in the PCB (PILA)
- Black wire to the “-” in the PCB (PILA)

LED

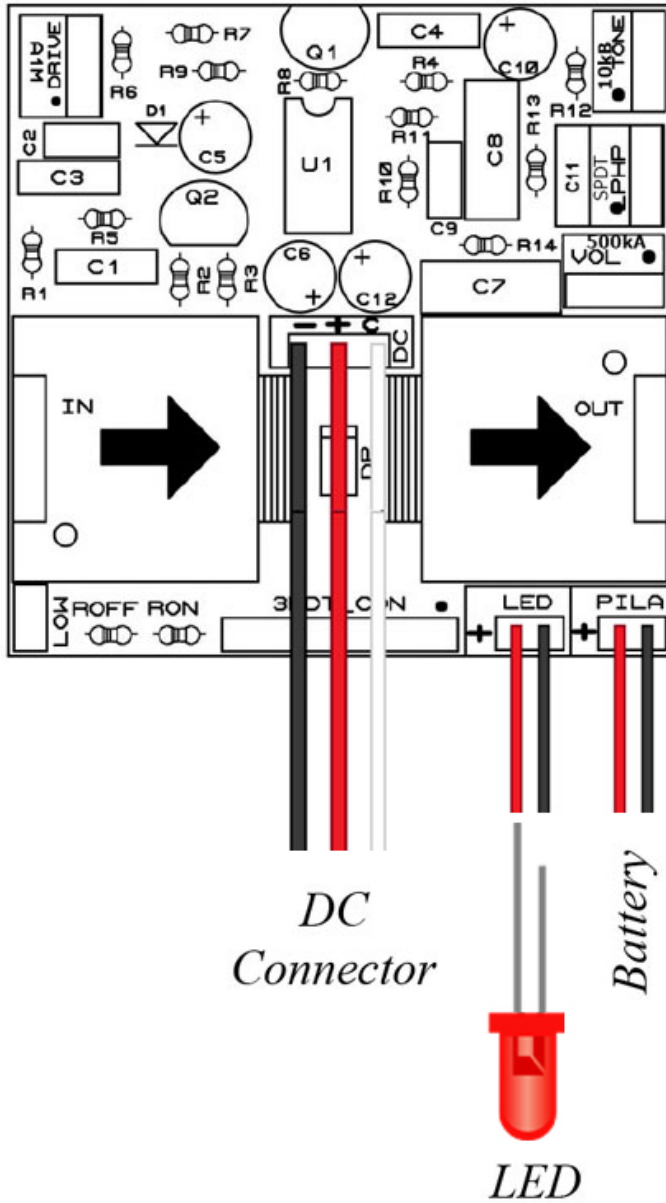


The LED is wired to the PCB is as follows:

- Longest pin to the “+” in the PCB (LED connector)
- Shortest pin to the “-” in the PCB (LED connector)

DC, BATTERY&LED CONNECTION

Pay attention to the way the battery and DC jack are connected, as connecting them the wrong way could damage some of the parts.



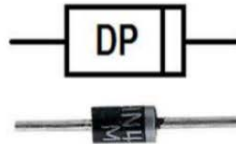
PARTS WITH ORIENTATION

The following parts orientation is **very important**, so pay attention when soldering them to the PCB!

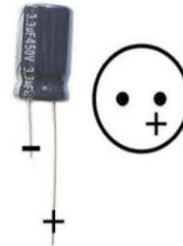
DIODES



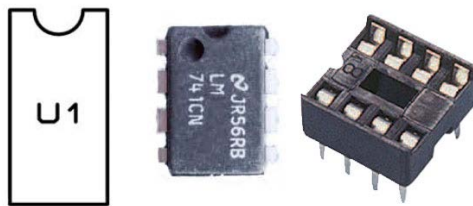
DP



ELECTROLYTIC CAPS

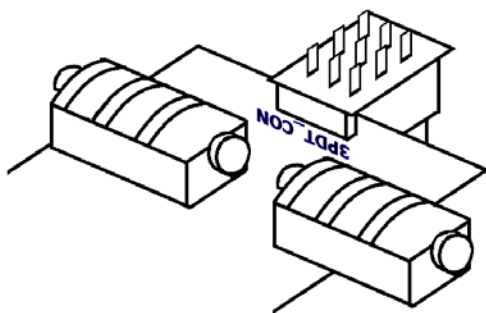


ICS&SOCKETS

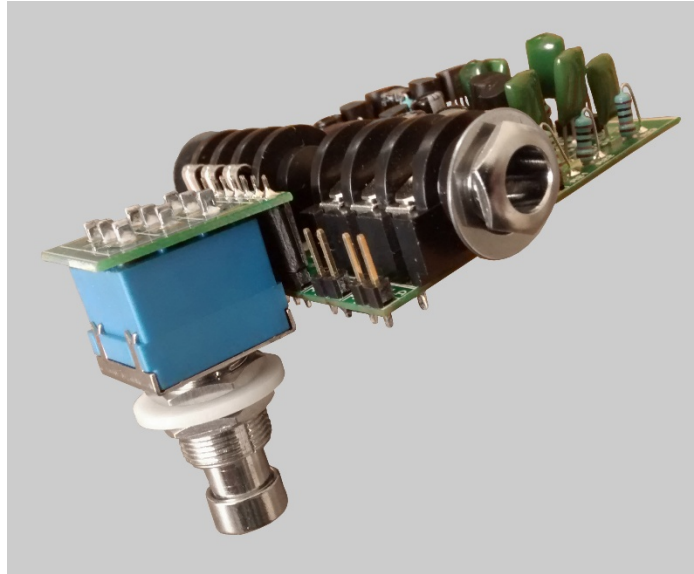


Instead of soldering the IC directly to the PCB, you may want to solder the socket first, and then plug the IC into the socket. This way, you can change the IC in the future or switch between different ones, and you avoid applying heat directly to the IC.

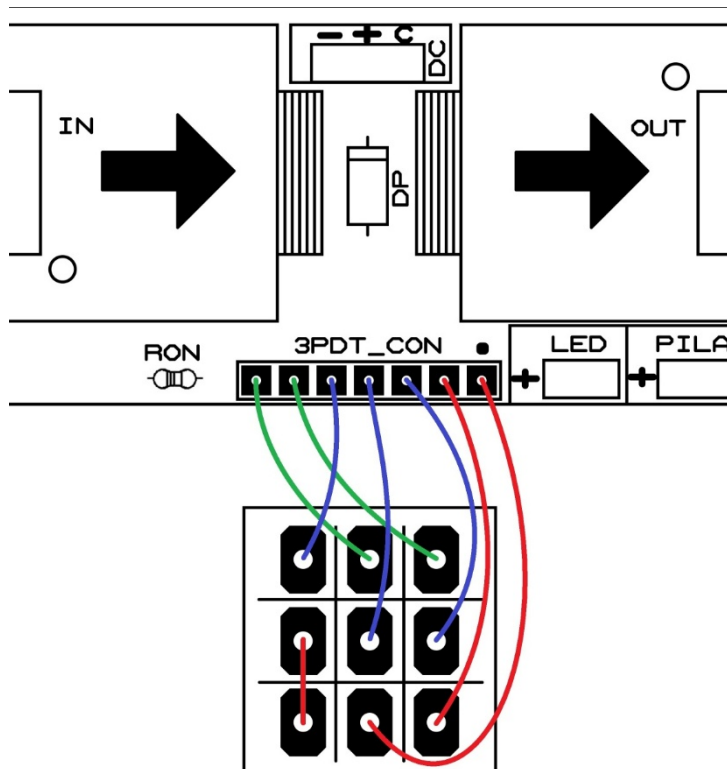
3PDT



The 3PDT must only be connected to the 6 pin connector in the PCB, as shown in the picture. **Both the female pin header and the 3PDT are soldered in the side of the board marked with the letters.**



If the 3PDT is not soldered using the PCB adapter (i.e. when getting only the PCB), it should be connected according to the following picture:

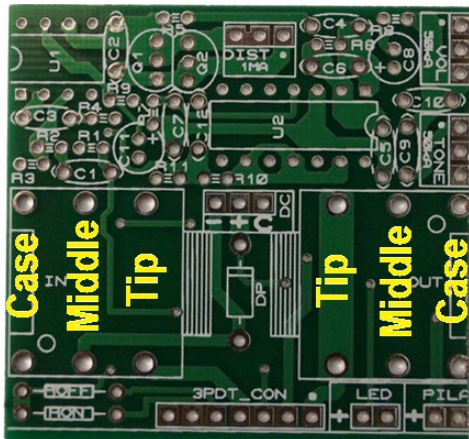


RON & ROFF

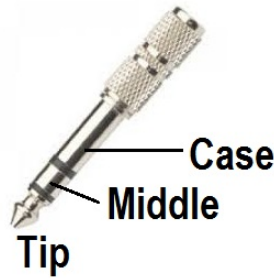
RON is connected to the “RON” mark in the PCB (left bottom, as in the left picture). Roff is not used on this pedal.

JACKS

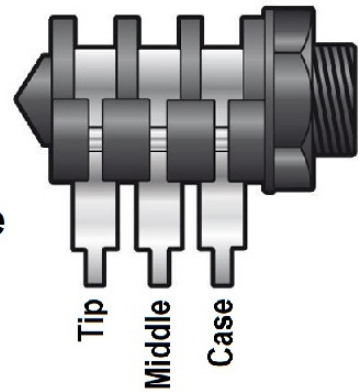
We send stereo jacks with our kits, that are directly soldered to the PCB. If you are using any other jack or if you want to wire it, you can follow this guidelines:



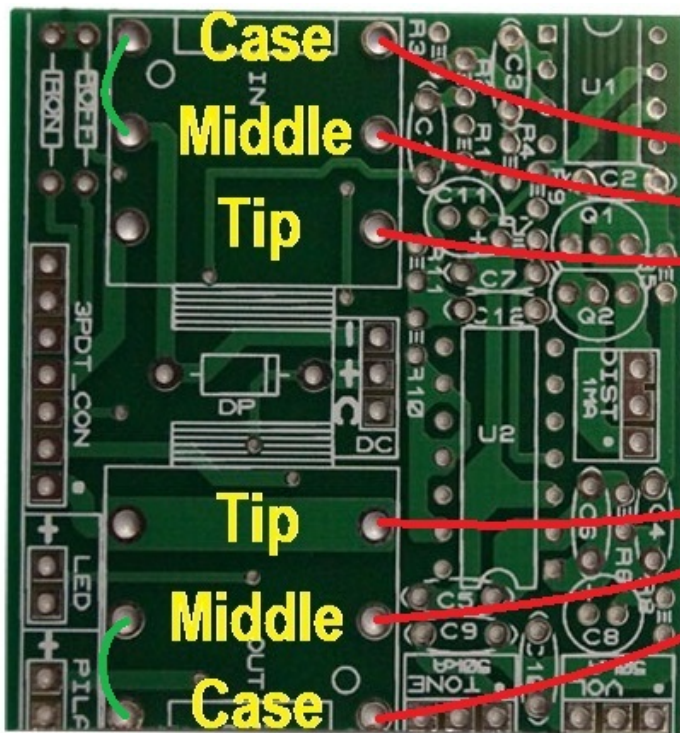
Connections in the PCB



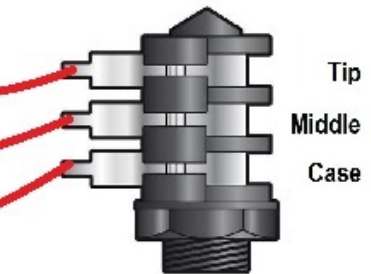
Connections in male jack



Connections in female jack



Connections in the PCB



Only if using 2 mono jacks!

Puzzle Sounds

MANUAL GENERAL



Index

En este documento puedes encontrar la documentación común a todos los pedales, desde cómo conectar el jack DC hasta cómo ensamblar tu PuzzleKit.

- 1. Guía general de construcción de un PuzzleKit.**
- 2. Guía general de ensamblado de un Kit**

Guía general de un Puzzlekit



PuzzleKit General Guidelines

De forma complementaria y para facilitar la construcción, [en nuestra web puedes visitar un videotutorial explicativo.](#)

POTENCIÓMETROS

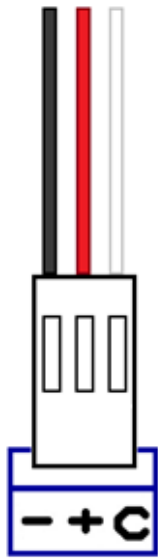


El cable de diferente color indica el pin 1 del potenciómetro, que va conectado al punto en el conector de la PCB como se indica en el esquema.

La letra y número que acompañan al potenciómetro indican el tipo y el valor: A (logarítmico), B (lineal), C (antilogarítmico) y W (log-antilog). En este caso, sería un potenciómetro de volumen de 100kA.

NOTA: si alguno de los controles funciona al revés (por ejemplo, un potenciómetro que disminuye el volumen al girarlo en sentido horario), seguramente hayas conectado el potenciómetro al revés.

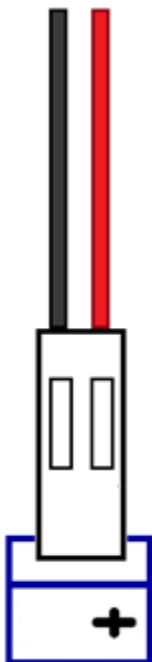
CONECTOR DC



La conexión del conector DC se realiza de la siguiente manera:

- Cable negro al “-” en la PCB
- Cable rojo al “+” en la PCB
- Cable blanco a la “C” en la PCB

LED&PILA



La conexión del LED a la PCB se realiza de la siguiente manera:

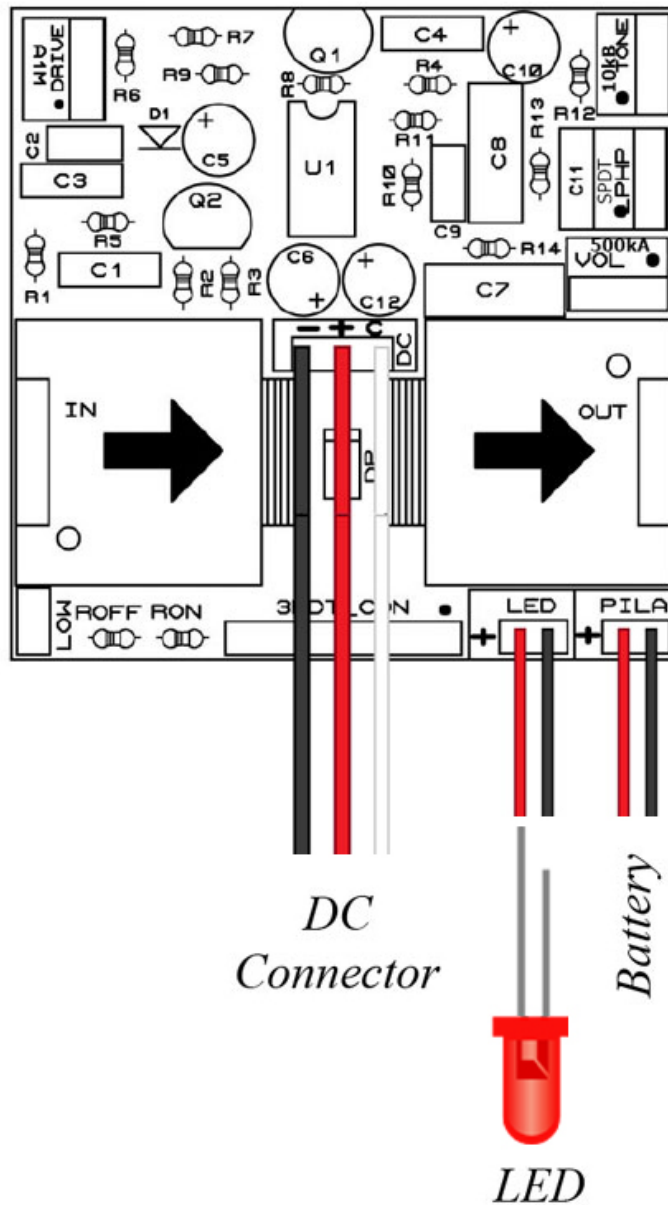
- Cable rojo al “+” en la PCB (marcado como LED)

La conexión de la pila a la PCB se realiza de la siguiente manera:

- Cable rojo al “+” en la PCB (marcado como PILA)

CONECTOR DC, LED Y CLIP BATERÍA

Prestar especial atención a la conexión del clip de la pila y el jack DC, ya que conectarlos al revés puede estropear alguno de los componentes de la placa.



Guía general de ensamblado de un Kit



Kit General Guidelines

Para instrucciones más detalladas sobre el ensamblado de los kits, puedes visitar la guía en nuestra web: [Ensamblado de un Kit](#)

POTENCIÓMETROS

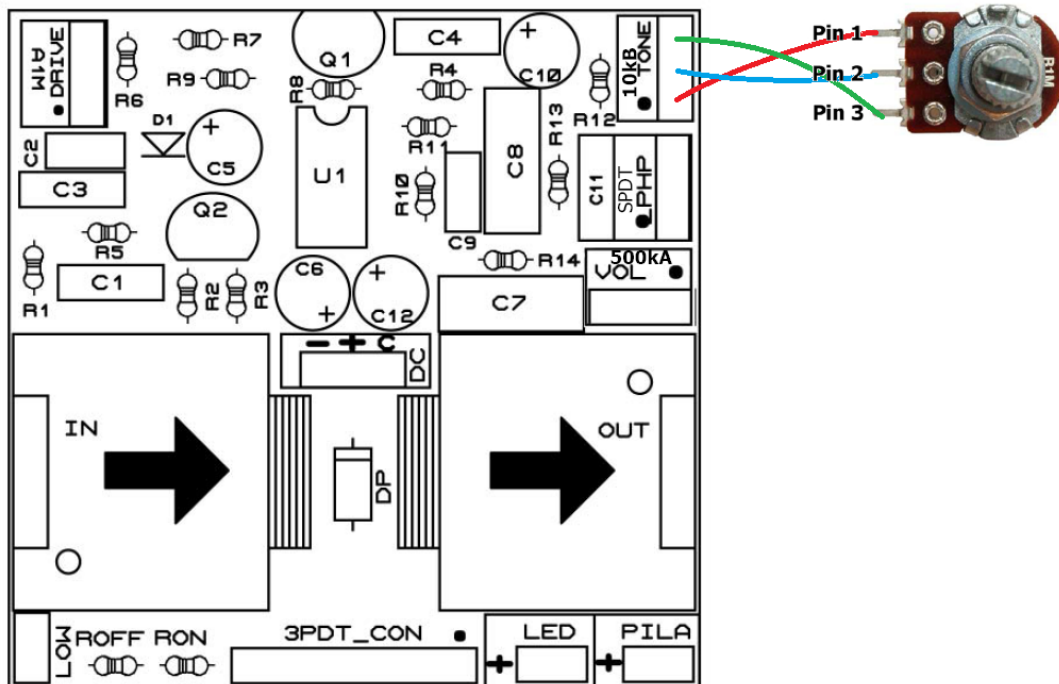


Pin 1
Pin 2
Pin 3

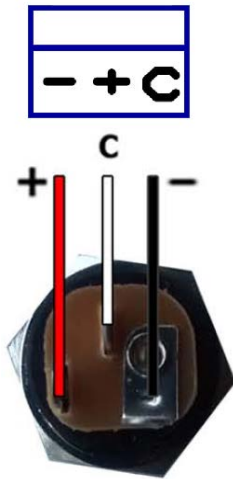


El potenciómetro se cablea a la PCB de la siguiente manera:

- Pin 1 al punto en la PCB
- Pin 2 al conector central de la PCB
- Pin 3 al conector restante de la PCB



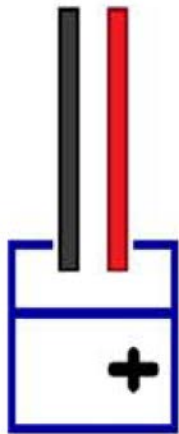
CONECTOR DC



El potenciómetro se cablea a la PCB de la siguiente manera:

- Pin 1 al punto en la PCB
- Pin 2 al conector central de la PCB
- Pin 3 al conector restante de la PCB

CONECTOR PILA



El clip de la batería se cablea a la PCB de la siguiente manera:

- Cable rojo al “+” en la PCB
- Cable negro al otro conector en la PCB

LED

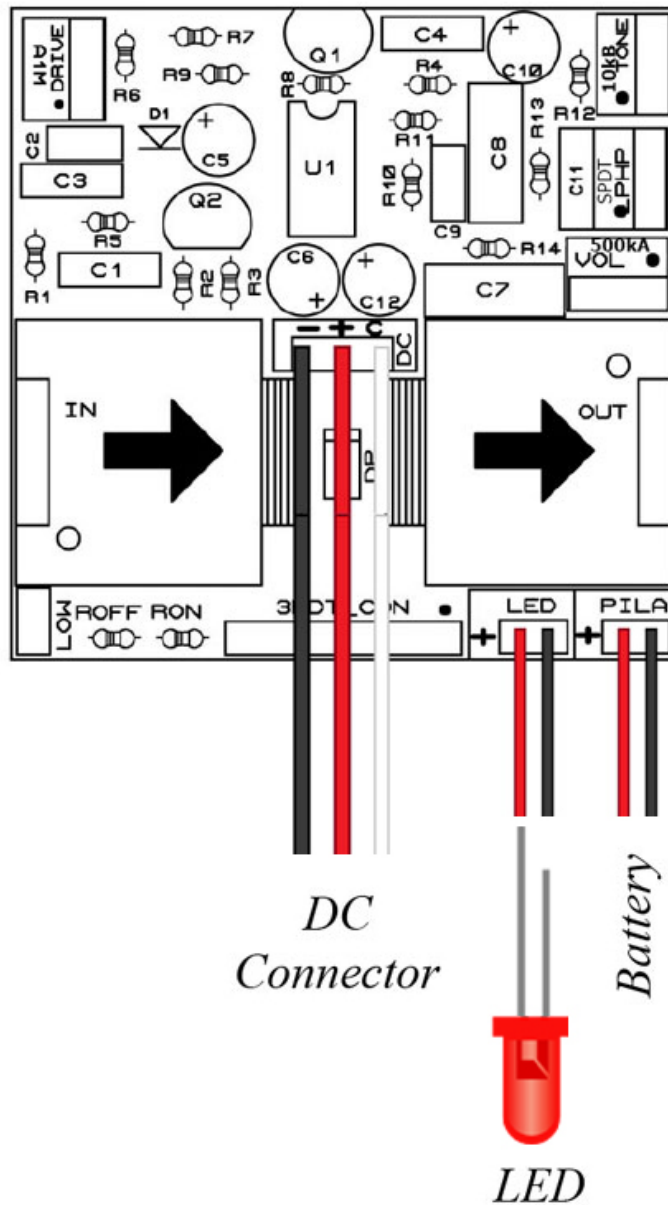


El clip de la batería se cablea a la PCB de la siguiente manera:

- Pata más larga al “+” en la PCB
- Pata más corta al otro conector en la PCB

CONECTOR DC, LED Y CLIP BATERÍA

Prestar especial atención a la conexión del clip de la pila y el jack DC, ya que conectarlos al revés puede estropear alguno de los componentes de la placa.



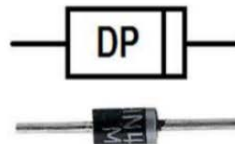
PARTES CON ORIENTACIÓN IMPORTANTE

La orientación de los siguientes componentes es **importante**, ¡comprueba que están en la posición correcta antes de soldarlos!

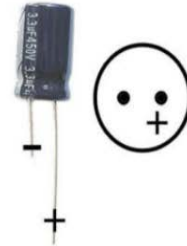
DIODES



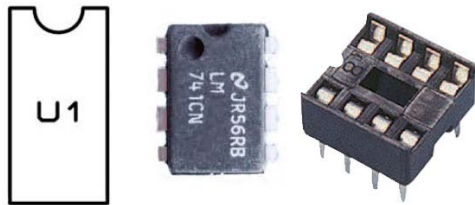
DP



ELECTROLYTIC CAPS

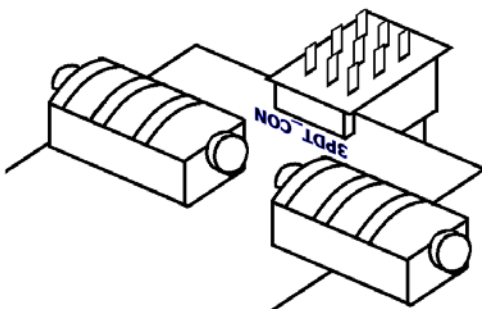


ICS&SOCKETS

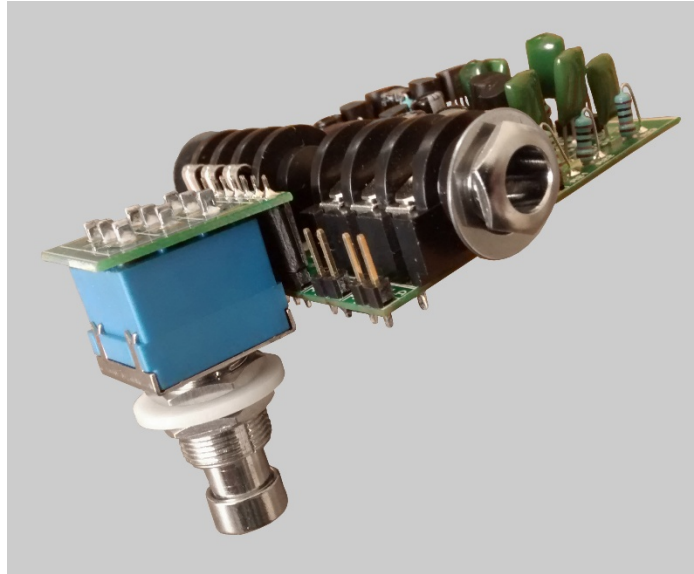


En lugar de soldar directamente el IC a la placa, es preferible soldar el socket, y encajar el IC en éste. Esto facilita el poder cambiarlo en caso de ser necesario, y evita aplicar el calor del soldador directamente al IC.

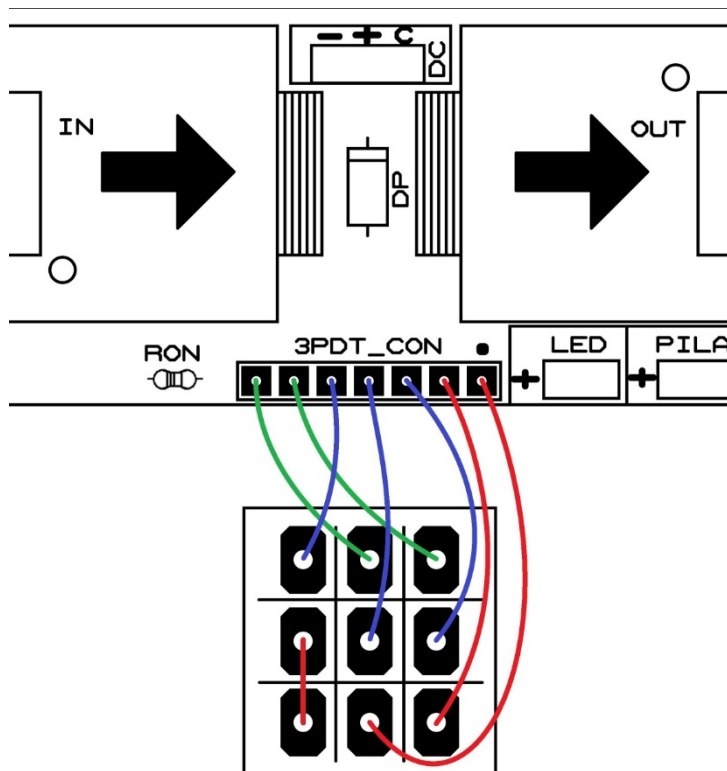
3PDT



El 3PDT sólo tiene que conectarse al conector de 6 pines de la PCB como se muestra en el diagrama. **Tanto el 3PDT como el conector hembra van soldados al mismo lado de la placa, indicado con letras.**



Si no se usa el adaptador PCB para soldar el 3PDT (por ejemplo, en caso de comprar únicamente la PCB), hay que soldarlo según el siguiente diagrama:

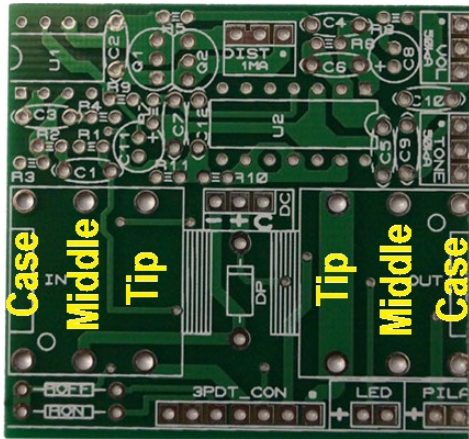


RON & ROFF

RON se conecta a la conexión "RON" en la PCB (esquina inferior izquierda, como se muestra en la imagen). Roff no se utiliza en este pedal.

JACKS

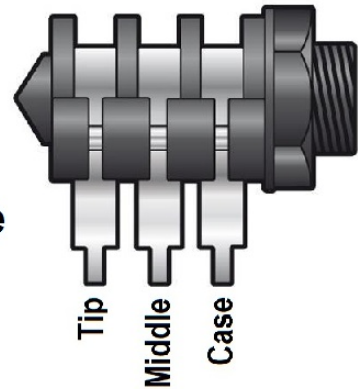
Con los kits, enviamos jacks que se sueldan directamente en la PCB. Si quieres utilizar otro tipo de jack o prefieres soldarlos con cable, puedes seguir estas instrucciones:



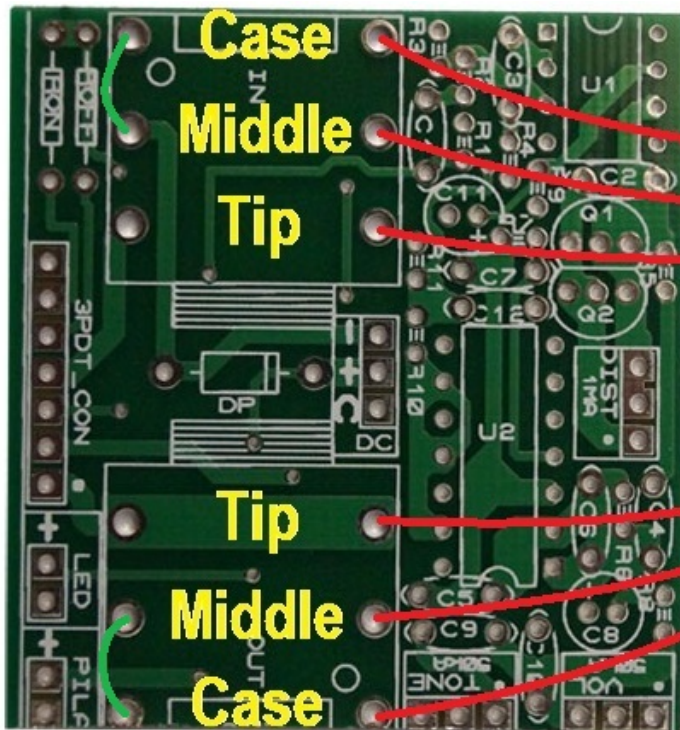
Connections in the PCB



Connections in male jack



Connections in female jack



Connections in the PCB

Case
Middle
Tip

Tip
Middle
Case

Only if using 2 mono jacks!