## UK-electronic ©2019 Manual JHMD-1

Based on the overdrive channel of the Marshall ® Jackhammer JH-1

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some importent components

TL072





Leuchtdiode (LED)



Elektrolytkondensator











Example: Resistor MF207 10K 1% Value: 10000 Ohm = 10KOhm 1 0 0 2x0 1%

> Breaking nose at the potentiometer Nase am Poti mit einer Flachzange abbrechen



## **Bill of material**

Quantity	Description
<b>c</b>	Mechanic
1	PCB "JHMD-1"
2	Mono jack 6,35mm
1	3PDT Switch
1	Pot 25K-BW (linear)
2	Pot 100K-BW (linear)
1	Pot 100K-AW (logarithmic)
1	DC-Buchse isolated NEBJ21-C 5,5/2,1mm
1	Some colored wire
3	socket DIP8
1	LED bezel crome for 3mm LED
4	Self-adhesive buffer 8x2mm (distance pot $\rightarrow$ PCB)
	IC's/Transistors/Diodes
1	Diode BAT41 (line Katode)
3	LED red 3mm Low Current (short leg Katode)
3	TL072 Dual OPV DIP8
	Resistors
7	Desiston 1V (hassen /hlash /hlash /hassen /hassen)
1	Resistor 1K (brown/black/black/brown/brown)
4	Resistor 2K2 (red/red/black/brown/brown)
1	Resistor 4K7 (yellow/violet/black/brown/brown)
1	Resistor 6K8 (blue/grey/black/brown/brown)
1	Resistor 8K2 (grey/red/black/brown/brown)
4	Resistor 10K (brown/black/black/red/brown)
1	Resistor 39K (orange/white/black/red/brown)
2	Resistor 4/K (yellow/violet/black/fed/brown)
5	Resistor 100K (brown/black/black/orange/brown)
1	Resistor 220K (red/red/black/orange/brown)
1	Resistor 680K (blue/grey/black/orange/brown)
4	Resistor IM (brown/black/black/yellow/brown)
	Capacitors
4	Ceramic can 47nF (47)
1	Ceramic cap 100n (101)
2	Equility cap $2 \ln F = 0.0022 \mu F MKT (222)$
2	Foil cap $10nF = 0.01022\mu F MKT (103)$
2	Foil cap $15nF = 0.015\mu F MKT (153)$
2	Foil cap $22nF = 0.022\mu F MKT (223)$
2 1	Foil cap $33nF = 0.033\mu F MKT (333)$
1	Foil cap $47nF = 0.047\mu F MKT (473)$
1	Foil cap $100nF=0.1\mu F MKT (104)$
1	Foil cap $150nE = 0.15E MKT (154)$
2	Foil cap $220nE = 0.22 \mu F MKT (224)$
- 1	Flektrolytic can radial $1\mu F$
2	Elektrolytic cap radial 100uF
	Elektorytie cap radiar roopr

## Assembling the PCB

First, the printed circuit board is assembled according to the assembly diagram shown below. Note that the capacitor marked 47nF on the left side of the board has been changed to 33nF.

Start with the lowest components, i.e. the resistors first,

the diodes, the sockets, the capacitors and finally from the back the potentiometers, which also hold the board in the case (don't forget the rubber buffers!)



After that you should make a visual inspection again and check the bottom of the board for tin bridges. Then the circuits can be plugged into your sockets.



## External wiring

The wiring is relatively simple and is limited only to the connections for the input, output, power supply and the LED for Effect On.



Notes on the mechanical structure

The small noses on the potentiometers are simply broken off with a pair of pliers (see illustration on page 2). You should use knobs with a maximum diameter of 20mm.

The holes of the audio jack sockets are located approx. 13mm from the bottom of the enclosure. The DC jack 11.5mm from the bottom.

The following drill diameters should be used: Potentiometer : 7.5mm Audio jack : 9,5mm 3PDT-switch: 12mm DC-jack: 12mm LED bezel: 6mm

As enclosure use the size GEH020, 27134 oder 1590B or other.

With a clean construction and correct wiring, the effect unit should work immediately. If you have any questions, please do not hesitate to contact us.





Device ready inside. Attention in the sample the capacitor is still 47nF



