## UK-electronic ©2019 <br> Manual JHMD-1

Based on the overdrive channel of the Marshall ${ }^{\circledR}$ Jackhammer JH-1


Color table for resistors MF207 FTE52 1\% and a example

## Resistor color code



Example: Resistor MF207 10K 1\%
Value: 10000 Ohm = 10KOhm


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


## Bill of material

## Quantity Description

## Mechanic

PCB „JHMD-1"
Mono jack 6,35mm
3PDT Switch
Pot 25K-BW (linear)
Pot 100K-BW (linear)
Pot 100K-AW (logarithmic)
DC-Buchse isolated NEBJ21-C 5,5/2,1mm
Some colored wire
socket DIP8
LED bezel crome for 3mm LED
Self-adhesive buffer $8 \times 2 \mathrm{~mm}$ (distance pot $\rightarrow$ PCB)
IC's/Transistors/Diodes
Diode BAT41 (line Katode)
LED red 3mm Low Current (short leg Katode)
TL072 Dual OPV DIP8

## Resistors

Resistor 1K (brown/black/black/brown/brown)
Resistor 2K2 (red/red/black/brown/brown)
Resistor 4K7 (yellow/violet/black/brown/brown)
Resistor 6K8 (blue/grey/black/brown/brown)
Resistor 8K2 (grey/red/black/brown/brown)
Resistor 10K (brown/black/black/red/brown)
Resistor 39K (orange/white/black/red/brown)
Resistor 47K (yellow/violet/black/red/brown)
Resistor 100K (brown/black/black/orange/brown)
Resistor 220K (red/red/black/orange/brown)
Resistor 680K (blue/grey/black/orange/brown)
Resistor 1M (brown/black/black/yellow/brown)

## Capacitors

Ceramic cap 47pF (47)
Ceramic cap 100p (101)
Foil cap $2,2 \mathrm{nF}=0.0022 \mu \mathrm{~F}$ MKT (222)
Foil cap $10 \mathrm{nF}=0.01 \mu \mathrm{~F}$ MKT (103)
Foil cap $15 \mathrm{nF}=0.015 \mu \mathrm{~F}$ MKT (153)
Foil cap $22 n \mathrm{~F}=0.022 \mu \mathrm{~F}$ MKT (223)
Foil cap $33 n \mathrm{~F}=0.033 \mu \mathrm{~F}$ MKT (333)
Foil cap $47 n \mathrm{~F}=0.047 \mu \mathrm{~F}$ MKT (473)
Foil cap $100 \mathrm{nF}=0.1 \mu \mathrm{~F}$ MKT (104)
Foil cap $150 \mathrm{nF}=0.15 \mathrm{~F}$ MKT (154)
Foil cap $220 \mathrm{nF}=0.22 \mu \mathrm{~F}$ MKT (224)
Elektrolytic cap radial $1 \mu \mathrm{~F}$
Elektrolytic cap radial $100 \mu \mathrm{~F}$

## Assembling the PCB

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


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

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

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.


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


| JHMD-1 - 4KпOb |  |
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