

# MO-FET

## Introduction

Let me introduce this nice Colour Module in DIYRE Colour Module Standard. This Colour Module combines the Mojo Maestro and a Fet Saturation. This colour module can do soft saturation with the Mojo part - Diodes and Opamp in three different styles. Heavy saturation and distortion can be made with the Fet. The Fet can be bypassed. This Guide will help with setting up this Colour Module. Have Fun!

## TABLE OF CONTENTS

Introduction	1
Functions	2
Assembly	2
Schematic	3
Bill of Materials (BOM)	4

**DISCLAIMER:** Proceed at your own risk. I am not liable for any damage, harm or loss of any kind resulting from the assembly and/or use of this PCB set. Safety provisions should always be exercised whenever working with any electronics. The following instructions are guidelines only. I can make no guarantee of the accuracy of contents contained within this document.

# Functions



The DIODE Clipping can be adjusted in 3 different styles. Set a Jumper to Medium, Soft or Hard. If you place more Jumpers it will be the more aggressive Style.

By setting a jumper on Low Gain the Gain of the Colour Module is reduced.

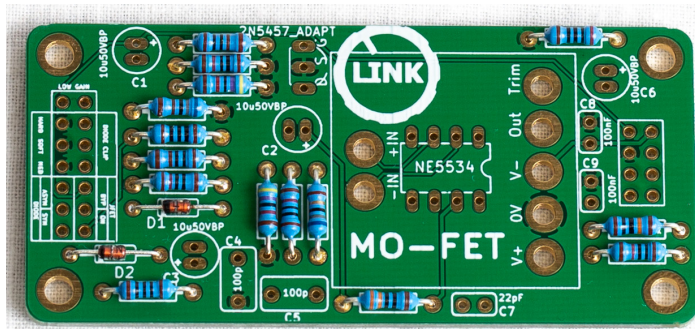


The JFET can be bypassed. Set the Jumper for saturation to ON. Set to BYP and you just use gentle Saturation with the diodes.

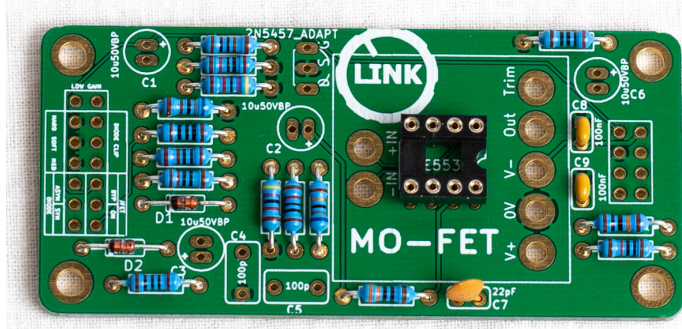
The ASYM/SYM jumper puts the Colour Module clipping diodes into asymmetrical or symmetrical operation

# Assembly

First of all add all Resistors and Diodes to the board.



After that step solder all smalls Capacitors.



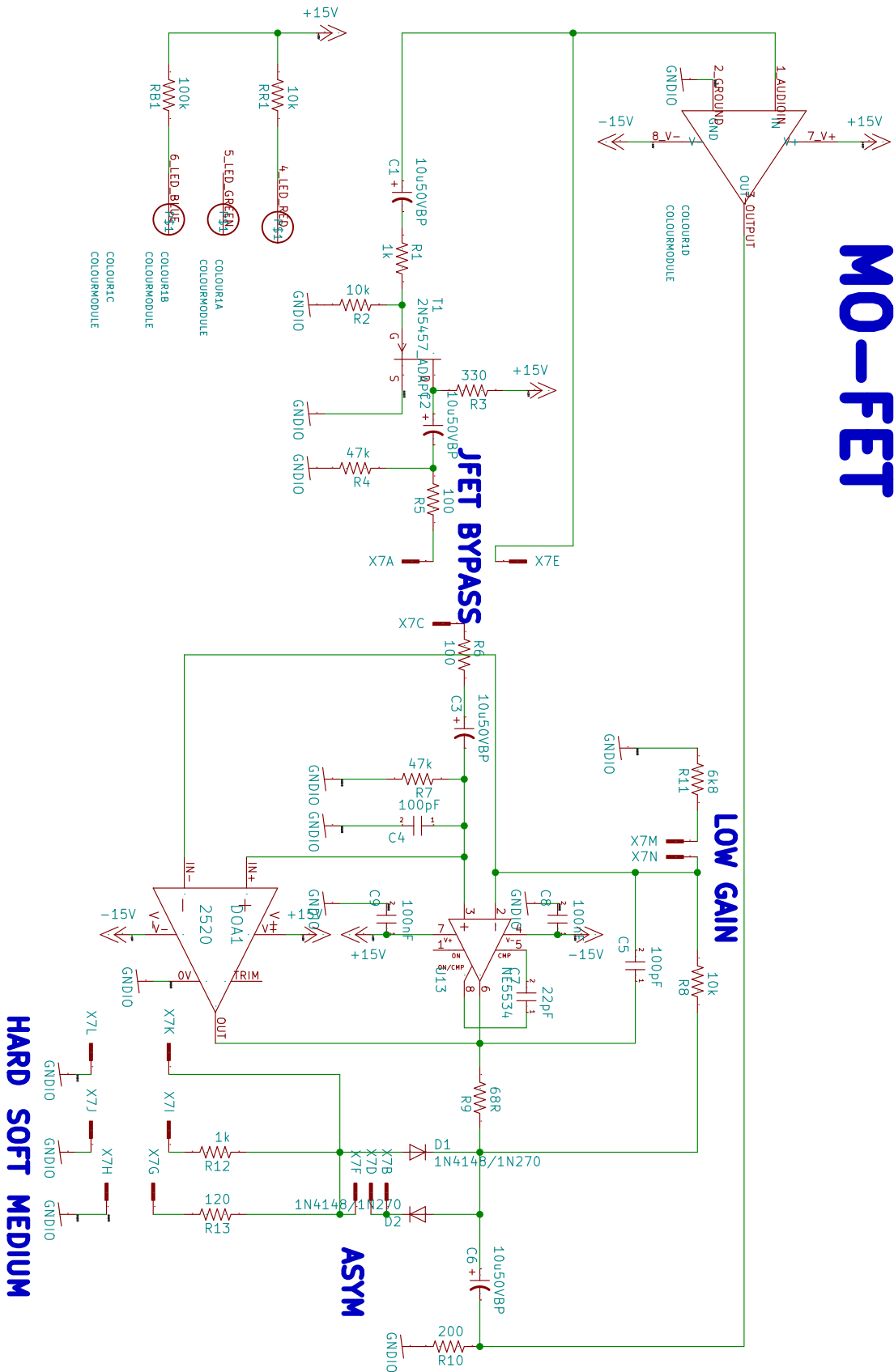
After having all small Parts on the PCB solder the Connectors, the FET, the Electrolytics and IC and DOA Sockets.



The last step is to put the Spacers on the Bottom of the PCB. To Finish the Colour Module put in the DOA or Opamp. Test the finished Colour Module in any Device that accepts DIYRE Colour Modules.

Schematic

# MO-FET



## Bill of Materials (BOM)

PART ON PCB	TYPE	COUNT	VALUE
	<b>BAG</b>	<b>1</b>	
R8,R2,RR1	Resistor	3	10k
R9	Resistor	1	68R
R7,R4	Resistor	2	47k
R6,R5	Resistor	2	100R
R10	Resistor	1	200R
R12,R1	Resistor	2	1k
	<b>BAG</b>	<b>2</b>	
R11	Resistor	1	6k8
R13	Resistor	1	120R
Jumper	Jumper	5	Jumper
R3	Resistor	1	330R
RB1	Resistor	1	100k
D2,D1	Diode	2	1N4148
	<b>BAG</b>	<b>3</b>	
C9,C8	Ceramic 2,5mm	2	100nF
C7	Kerko 2,5mm	1	22pF
C3,C6,C2,C1	Electrolytic Bipolar	4	10u50VBP
C5,C4	Wima 5mm	2	100pF
	<b>BAG</b>	<b>4</b>	
MINI PCB	MINI PCB	1	Adapter PCB
PIN Header	PIN Header	1	right angle 3pol
X7	Connector	1	Samtec 8POL
Socket Opamp	Socket Opamp	1	Socket GS 8
X7	PIN Header	1	14 pol connect
U13	Opamp	1	NE5534
T1	JFET	1	2N5457_ADAPT
Spacer	Spacer	4	Spacer
	<b>BAG</b>	<b>5</b>	
PCB	PCB	1	PCB
	<b>BAG</b>	<b>6</b>	
DOA Sockets	DOA Sockets	6	Doa Sockets(optional)