

LABO ★ K EFFECTS

ANALOGUE VUMETRE DRIVER KIT

ISS 2

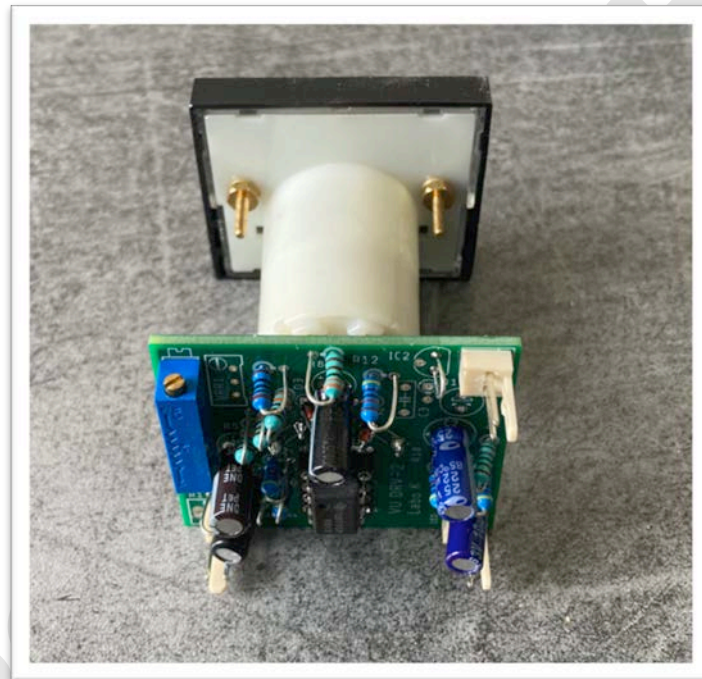


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OVERVIEW

Driver for analogue vu meter.
Balanced or unbalanced input.
12V to 24V power supply.

Based on the classic driver diagram, this driver is easy to use. 0 Vu can be adjusted to the required level using a trimer. The signal to be measured can be asymmetrical or symmetrical. The driver's power supply range is from 12 to 24 V. The driver board can be fitted directly to the vu meter terminals.

The power supply for the vu meter's LEDs is provided.



CONTENT

A vumetre card for connecting :

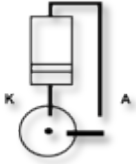
- An analog vumeter.
- A 12 to 24V power supply.
- A balanced or unbalanced signal input.
- The vumetre's LED lights.



CONVENTIONS

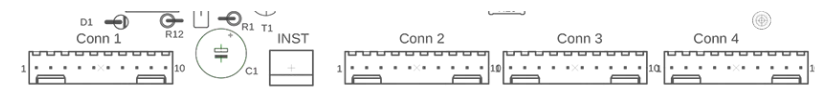
Component layout

Vertical layout of diodes



Straps are made using component legs.

The Molex KK connector tab is located on the edge of the board.

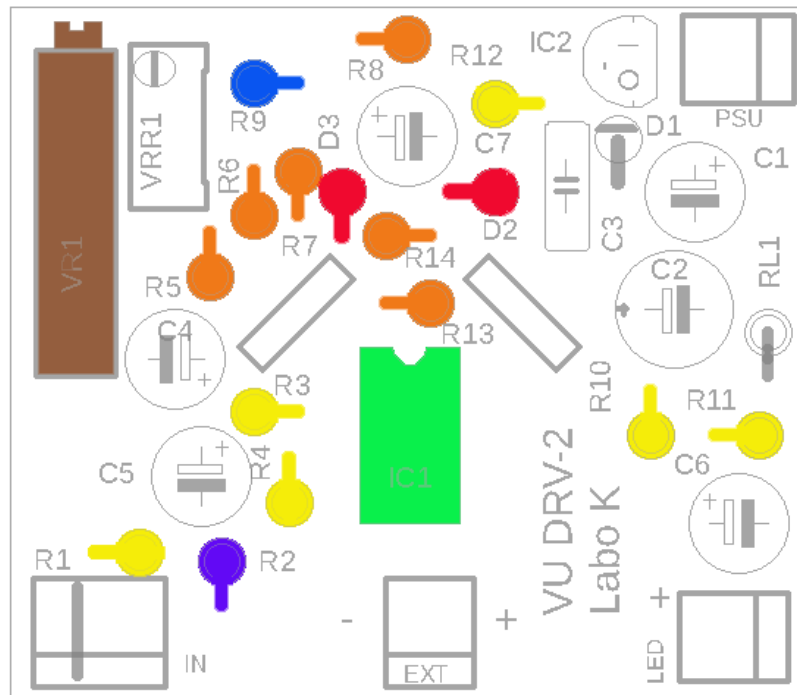


Location

Pin 1 of the Molex KK connectors is on the left.

ASSEMBLY INSTRUCTIONS FOR THE VUMETRE CARD PART 1

	BAT 85	D2, D3
	DIL 8 socket	IC1
	100R	R9
	3K3	R5, 6, 7, 8, 13, 14
	47K	R1, 3, 4, 10, 11, 12
	STRAP	R2 =47K if symmetrical signal
	Trimmer 10K	VR1



Pay attention to:

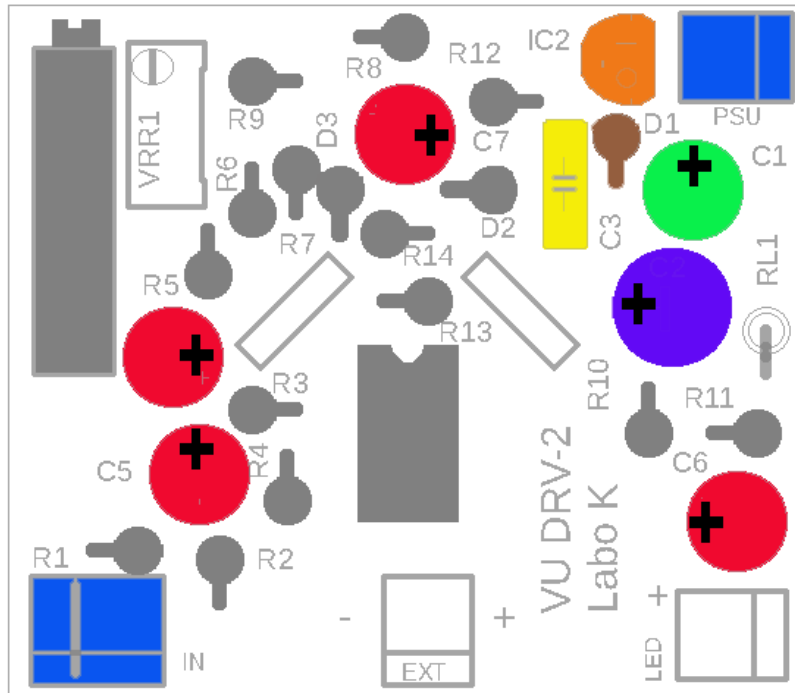
Layout diodes

If the signal to be measured is asymmetrical R2 = Strap

Positioning of the DIL8 support

ASSEMBLY INSTRUCTIONS FOR THE VUMETRE CARD PART 2

	C 10u/63V	C4, 5, 6, C7 (See Note Pay attention)
	C 22u/50V	C1
	Connector Molex	IN, PSU
	78L12	IC2
	22n	C3
	C 22u/25V	C2
	1N4002	D1

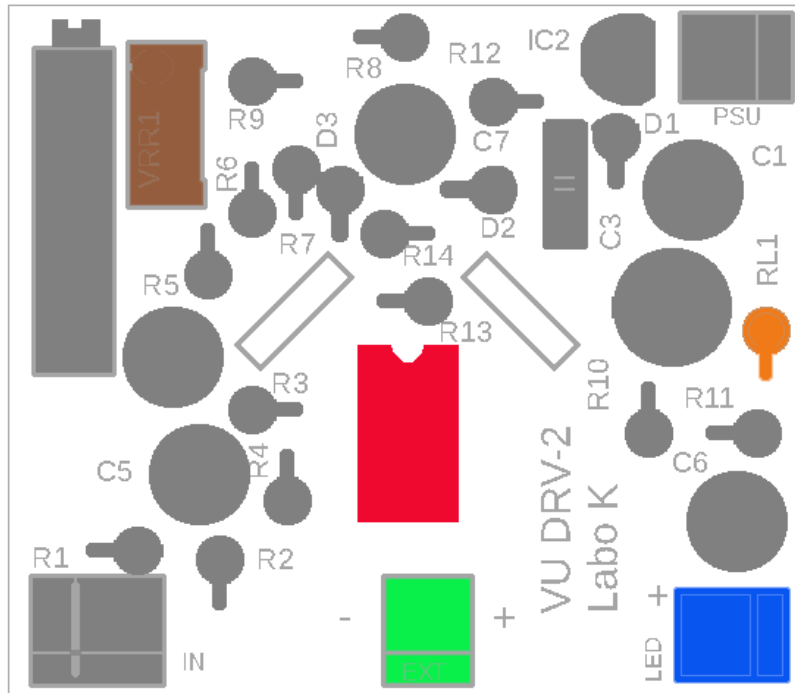


Pay attention to:

Positioning of capacitor C7 (the silk-screen printing on the PCB is incorrect)

ASSEMBLY INSTRUCTIONS FOR THE VUMETRE CARD PART 3

	TL071	IC1
	Connector EXT	Only if the vumetre has no terminals
	Connector LED	Option for vumetre lighting
	Resistor LED	Defined by vumetre LED intensity
		Component not installed

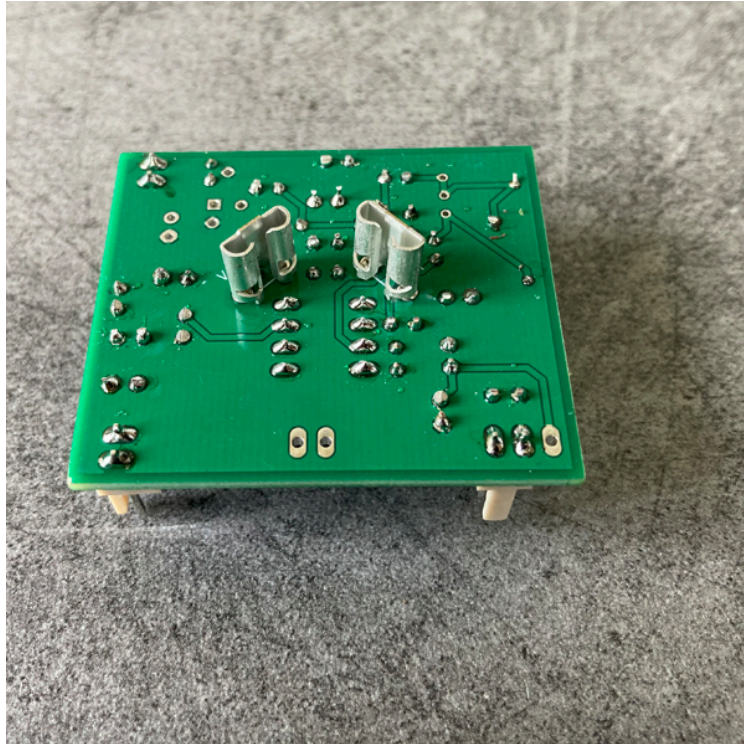


Pay attention to:

Pay attention to:

ASSEMBLY INSTRUCTIONS FOR THE VUMETRE CARD PART 4

You need to turn the card over to solder the terminals for vumetre.

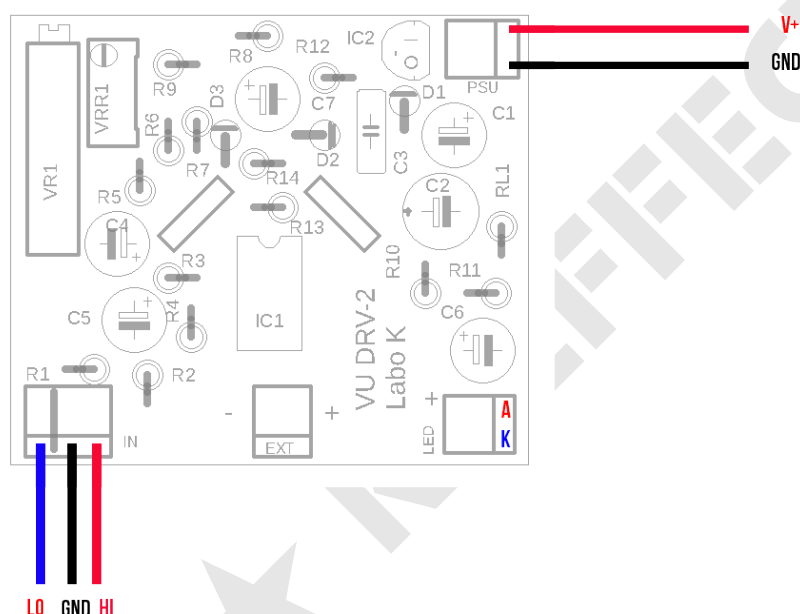


Pay attention to:
Positioning the terminals

ASSEMBLING THE COMPONENTS

The card is powered via the PSU connector.
The supply voltage is taken from the assembly to be measured.
(15V to 24V)

For a voltage of 12V, the 78L12 should not be installed.
A jumper should be fitted between pins I and O of the regulator.



The signal to be measured arrives at the IN connector.
For an asymmetrical signal, the LO wire is omitted.

If the meter is illuminated by LEDs, connect the lighting to the LED connector, observing the polarity of the LEDs.

The various cables are soldered and sleeved onto the corresponding pins of the male KK connectors.











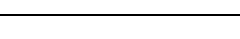
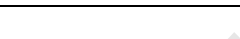
However, it is possible to crimp the corresponding female connectors.

Molex KK254 2-pin connectors

Molex KK254 3-pin connectors

Crimps : 08-50-0032

COMPONENTS LIST

NAME	VALUE	VISUAL	REFERENCE
R1	47K		
R2	47K (*) or strap		
R3	47K		
R4	47K		
R5	3K3		
R6	3K3		
R7	3K3		
R8	3K3		
R9	100R		
R10	47K		
R11	47K		
R12	47K		
VR1	10K		
D1	1N4002		
D2	BAT85		
D3	BAT85		
C1	22u/50V		
C2	22u 25V		
C3	22n Film		
C4	10u 63V		
C5	10u 63V		
C6	10u 63V		
C7	10u 63V		
IC1	TL071+socket		
Conn IN	Molex KK3		
Conn PSU	Molex KK2		
PSU	Molex KK2 wire		

Legal notice:

Labo ★ K Effects shall not be responsible and disclaims all liability for any damage (whether direct or consequential) that may result from a wrong use of the kit by the user.