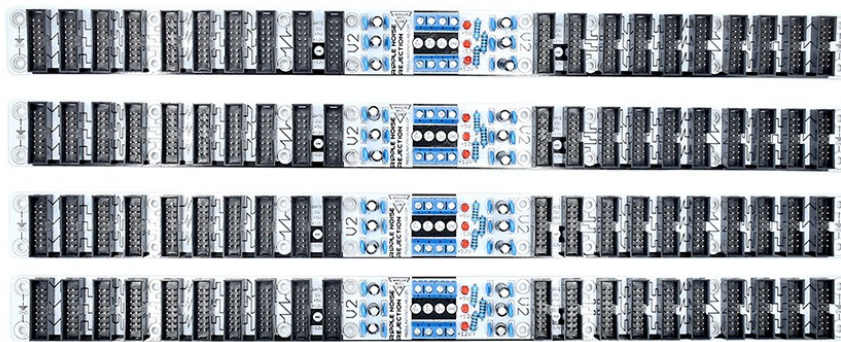
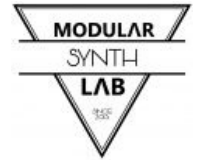


# MSL POWER KIT

## User manual & assembly guidance

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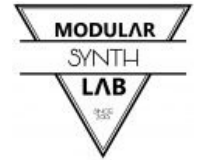
## ATTENTION ! DANGER TO LIFE!!!

- Installation affects parts and cables that conduct mains AC voltage (230/115V) that is dangerous to life
- Replacement or installation of these parts has to be carried out by authorized personnel only who are familiar with all valid safety rules and are able to guarantee the compliance of these rules
- Laymen are not allowed to carry out these works!
- If you do not have sufficient knowledge to install these parts please contact an expert
- Do not try to install and operate these parts if you don't know exactly what you are doing!

# MSL POWER KIT

## User manual & assembly guidance

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### KIT Overview

Kits are available in few set size versions. The number of items is different for each set.

- 1-2 Meanwell RT65-B triple output power supply
- 1-4 ModularSynthLab noise filter Bus Boards
- 1-2 Universal AC power inlet socket

KIT 's don't include mounting elements like wires, screws, or connectors. These items must be sourced separately in an amount appropriate to the size of built eurorack case project.

### PSU Features

- Universal, full range AC input
- Protections: short circuit, overload, over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- High efficiency, long life, and high reliability



DC Output Voltage	12V Chanel	-12V Chanel	+5V Chanel
Rated Current	2,8A	0,5A	5A
Current Range	0—3,5A	0—1A	0—8A
Rated Power	64,6W		

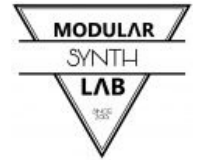
Each output can work within the full current range. But the total output current can't exceed rated output power.

The RT65-B power supply has a wide range mains voltage input and can be used with any voltage range 88-264VAC.

# MSL POWER KIT

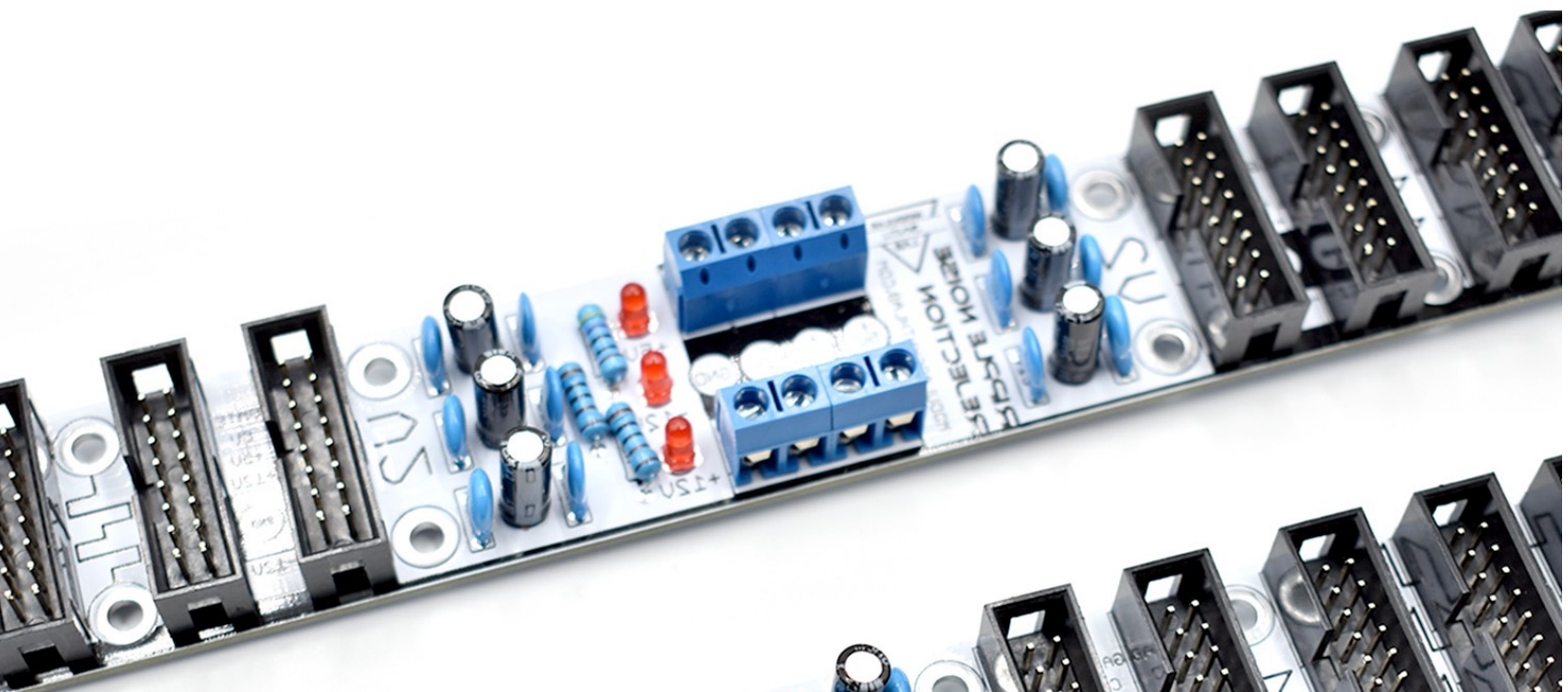
## User manual & assembly guidance

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### Bus Board Features

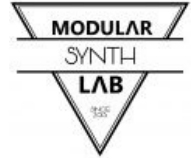
- Filtered BusBoards with build-in noise filtering capacitors bank.
- Those are ideal bus boards for PSU included in the kit but they can work with other eurorack power supplies as well.
- The Bus Boards contains 20x safety shrouded, 16 pin eurorack power connectors.
- 2x Decoupling capacitors bank helps to attenuate noise of mid, high and low frequencies caused by PSU/AC power signal and digital modules
- 2x screw terminals (+12V, -12V, +5V, GND)
- Screw terminals located in the middle of the bus board to reduce circuit inductance and distribute voltage evenly through the whole board
- 3x LED indicators on every power rail
- 4x grounded mounting holes at both ends of Bus Board for easy case/rails grounding
- "Cut to length" option - cut anywhere between 16 pin connectors to customize bus board length. We recommend keeping equal length on both sides of the screw terminals.
- Each Bus Board features integrated mounting holes, so you can secure the busboard to the inside of your case. If you're mounting inside a wood case, you can use screws with standoffs to raise the board off the mounting surface.



# MSL POWER KIT

## User manual & assembly guidance

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### AC Power Socket Features

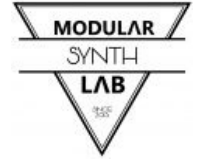
- Integrated switch and 10A fuse, max. 250VAC
- Connector type: AC supply
- Kind of connector: Male
- Current rating: 10A
- Standard: IEC 60320
- Mechanical mounting: For panel mounting with screw
- Electrical mounting: 4,8mm connectors
- Fuse size: 5x20mm
- Contacts configuration: DPST
- Rated voltage: max. 250V AC
- Weight: 34.304 g



# MSL POWER KIT

## User manual & assembly guidance

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### Installation guide

Installation of the power supply and power socket has to be carried out by authorized personnel only who are familiar with all valid safety rules and guarantee the adherence of these rules. Installation affects parts that conduct mains voltage.

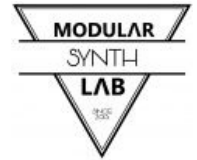
#### **Laymen are not allowed to carry out these works!**

- Particularly all parts that conduct mains voltage (PSU, IEC mains inlets, wires, connectors, and so on) have to be covered against any contact with the human body. Failing to do so could result in the risk of an electric shock.
- Recommended wires size to carry all the connections is 1,15—1,5 mm<sup>2</sup> (17-16 AWG)
- All connections have to be done by using insulated connectors, multi-wire terminal blocks, and crimp connectors.



# MSL POWER KIT

## User manual & assembly guidance

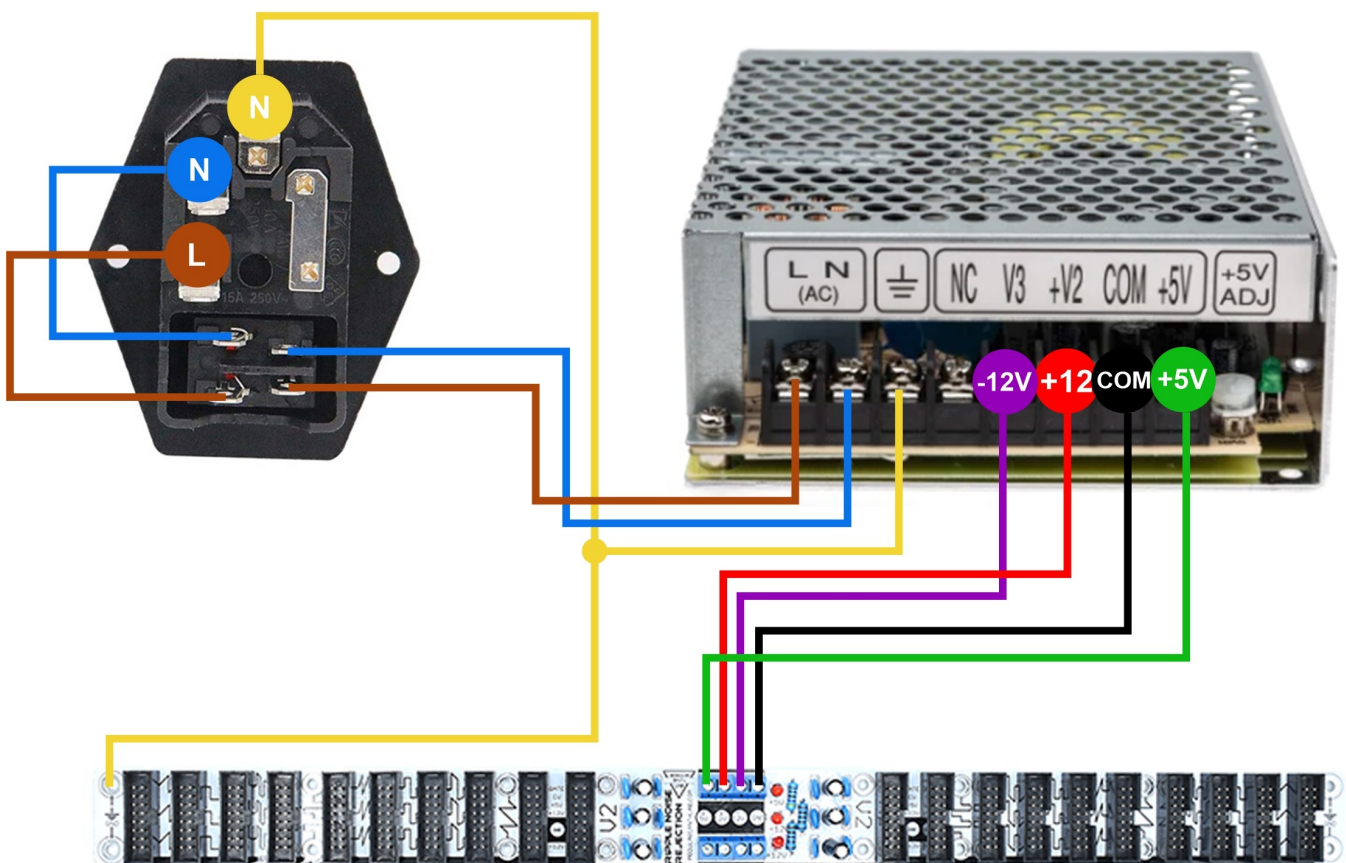


### Wiring guide

Below you will find detailed notes concerning the wiring of mains inlet, the power supply and the Bus Boards. But even these notes are designated for authorized personel only!

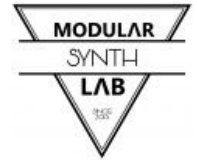
**Installation affects parts that conduct mains voltage!**

### Wiring single PSU with single Bus Board and AC Power Socket

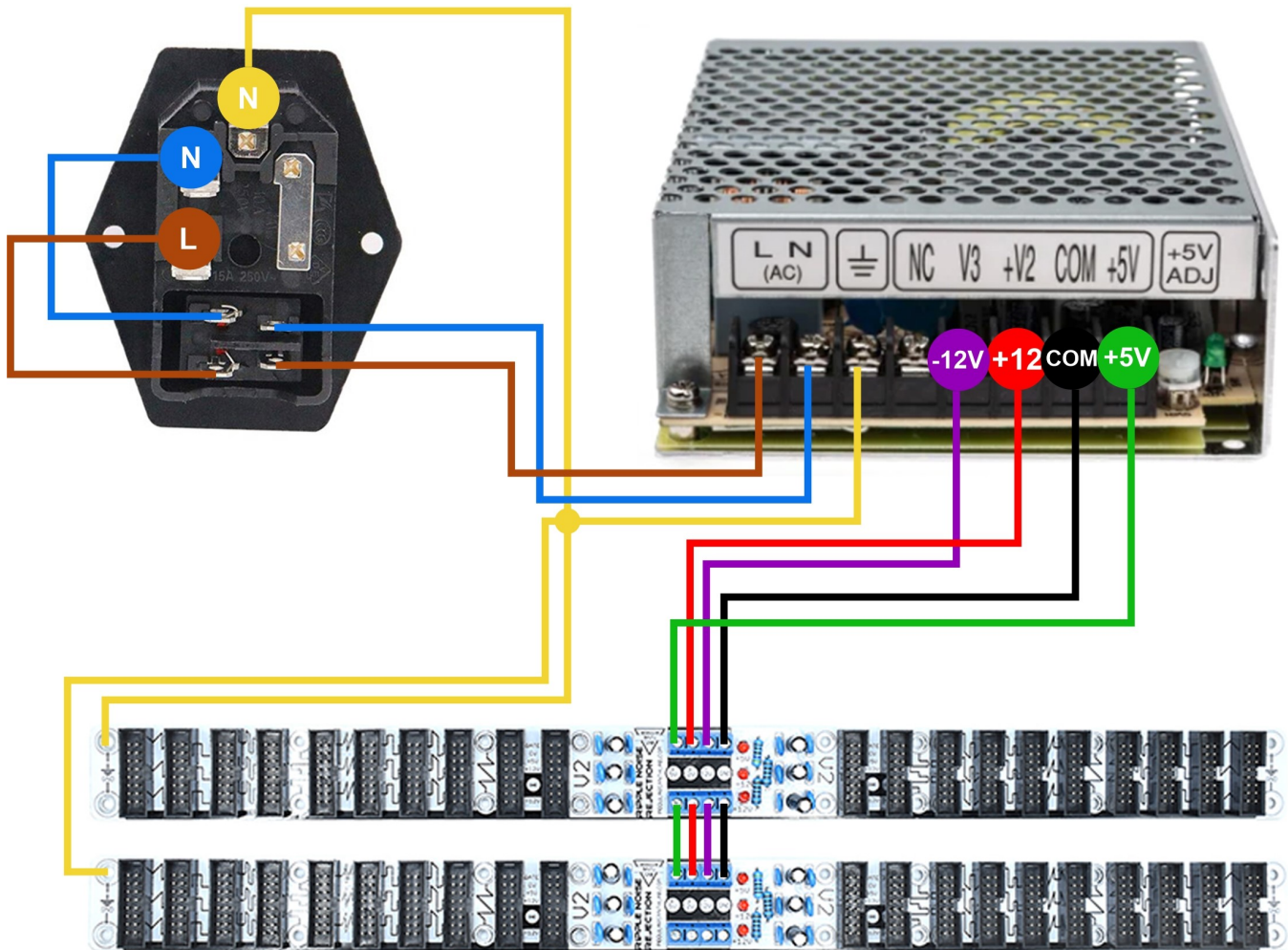


# MSL POWER KIT

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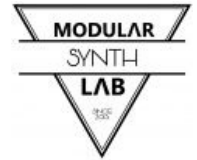


### Wiring single PSU with two Bus Boards and AC Power Socket



# MSL POWER KIT

## User manual & assembly guidance



### Wiring two PSUs with four Bus Boards and single AC Power Socket

