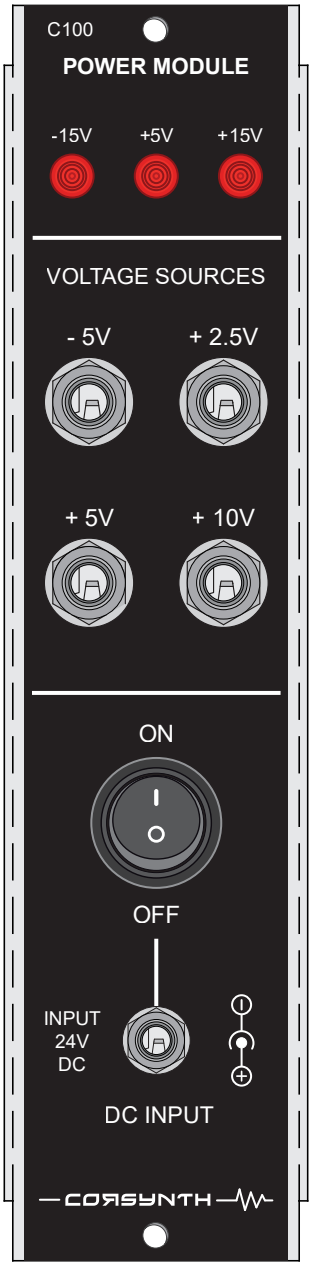
CORSYNTH

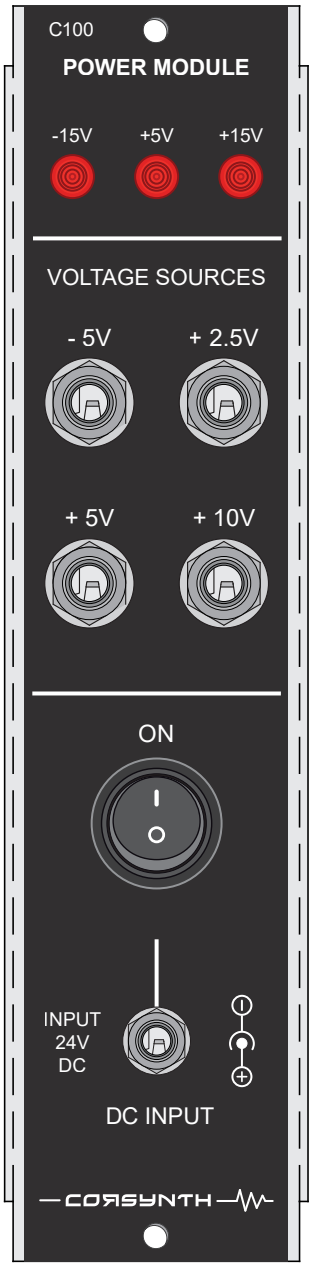
C100 POWER SYSTEM



USER MANUAL

C100 POWER SYSTEM

The C100 Power System is the solution for powering your modular system.



The C100 Power System is composed of :

- A C100 Power module, with the external PSU input , the on / off switch, the rail status leds but also it's is a Voltage Sources module.
- An universal external PSU (works from 100-240V and 50-60Hz)
- A high quality internal DC /DC converter
- A power distribution board
- Power cables

The advantages of this kind of power system are :

- There is no dangerous voltages inside de cabinet.
- It's much less heavy than a linear PSU , making the cabinets more portable
- Using a distribution board reduce to 0 the amount non used power cables inside the cabinet

The C100 Power System is really easy to install and not special tools are requires (just a screw driver). A step by step installation guide is provided in the user manual.

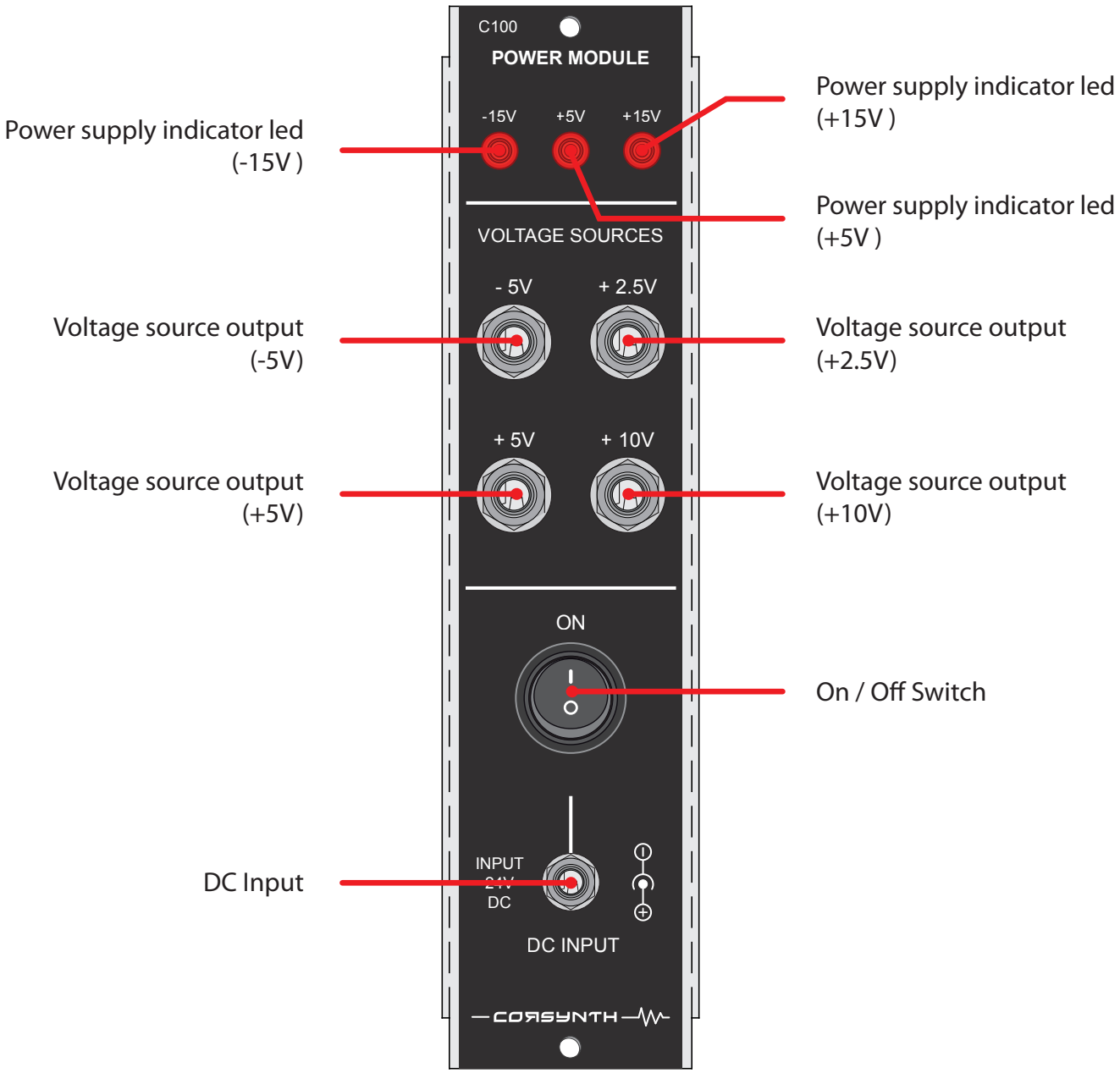
The C100 Power System can provide up to an 1 Amp per rail (+/-15V). The 5V are taken from the +15V rail (250mAmp max in v2.0, 100 mAmp max in v1.0). The 5V volts only use the amperage that it's needed so if no modules uses the 5V rail no amperage is consumed and all is available at the 15V rail.

The C100 designed to power up to 24 modules, that it's more or less a 32-36 spaces cabinet depending on the power consumption of each module and how many non-single-wide modules are installed on the system.

Known incompatibilities

Due design incompatibilities Synthesizers.com Q109 Envelope Generator doesn't work correctly using the C100 Power System

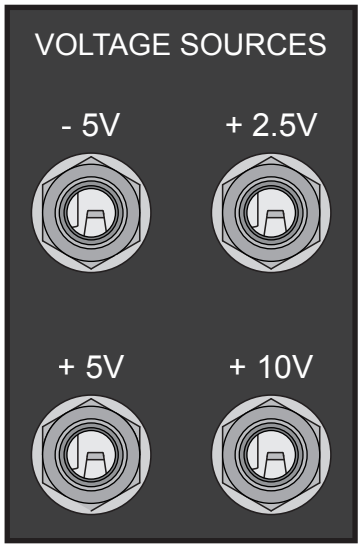
C100 POWER SYSTEM
POWER MODULE



CONTROL DESCRIPTION

POWER SUPPLY LEDS INDICATORS

These leds indicates if the internal PSU is turned on, also they show if all the rails are working properly.



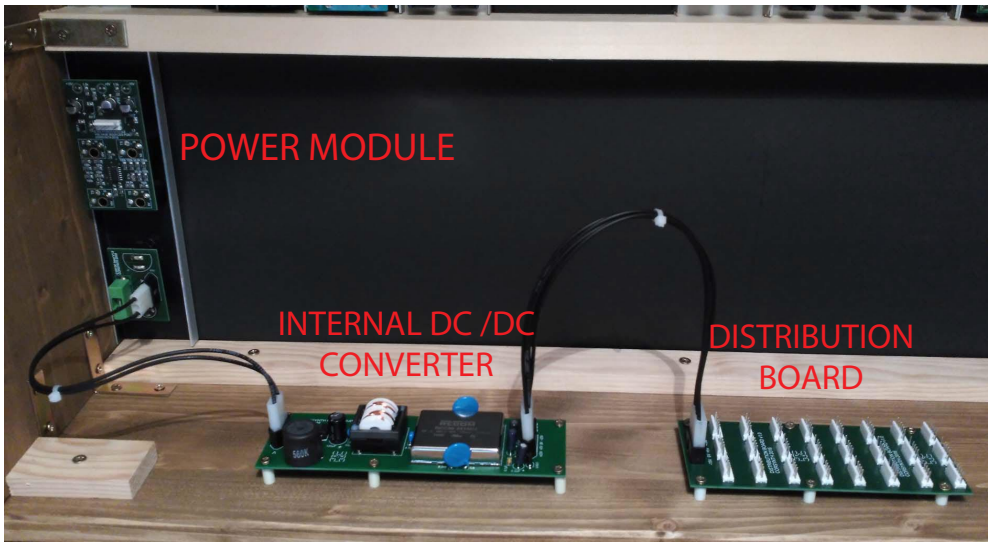
VOLTAGE SOURCES

This four jacks are four fixed voltage outputs. This voltages are very useful to add offsets to signals, as modulation signals...
The module needs to be connected to the bus board like any other module to work. This voltages are not taken directly from the PSU.

ON / OFF SWITCH - DC INPUT

The On / Off Switch turn on and off the internal power supply. The external brick PSU is connected to the DC input.

INSTALLATION GUIDE



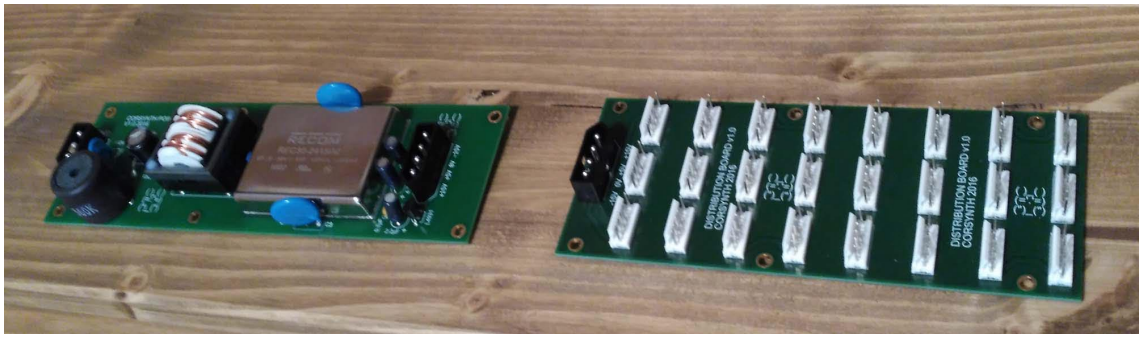
This picture shows how the C100 Power system will look like after you finish the installation. Please follow the steps indicated in this installation guide.

IMPORTANT !!!!

For safety reasons and to avoid damaging in the power system, before starts the installation please be sure that the external DC brick is not connected to the C100 Power Module.

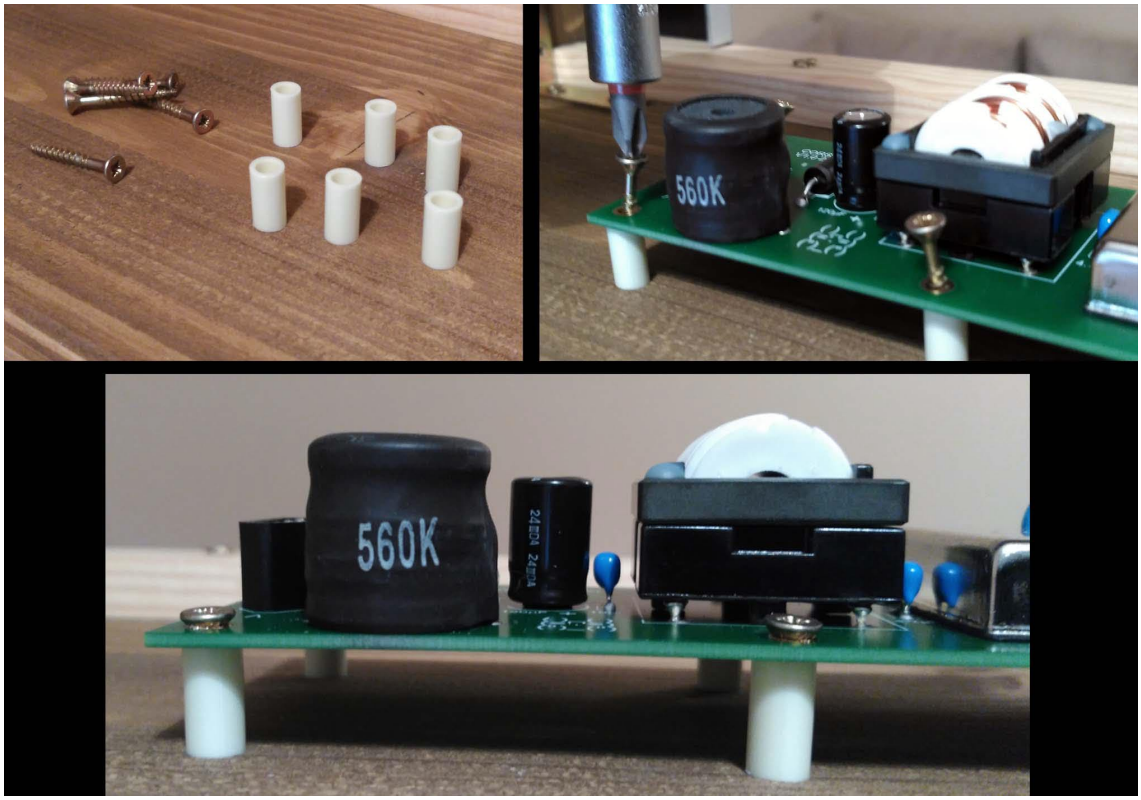
STEP 1

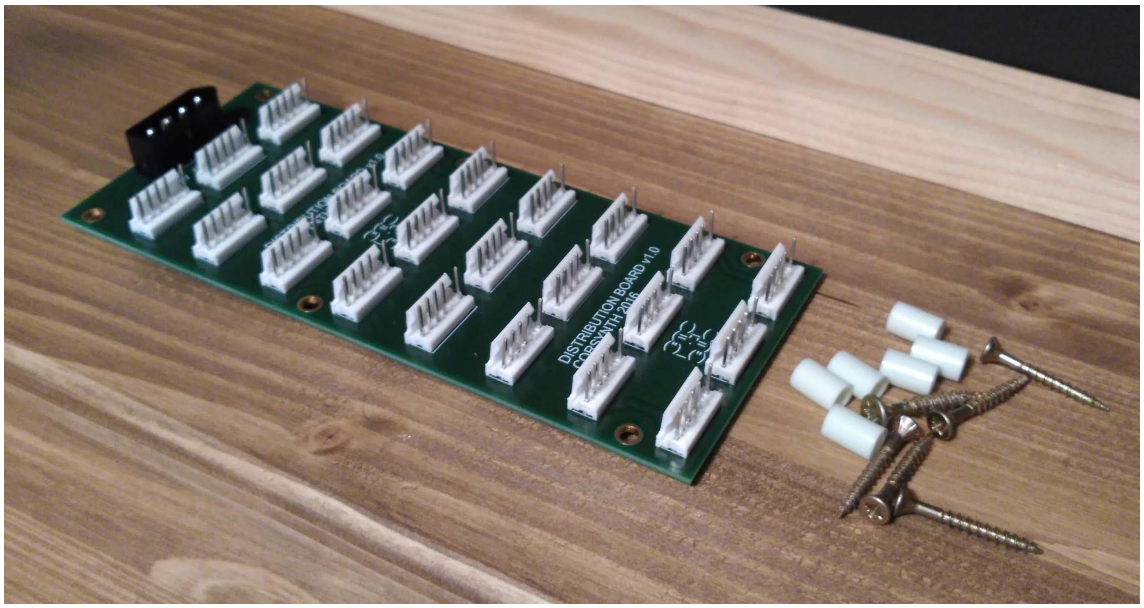
Place the DC / DC converter board and the Distribution Board where you want to install them inside the cabinet. Check that the cables provided are long enough to connect the C100 Power module to the DC / DC converter and the Distribution Board to the DC / DC converter.



STEP 2

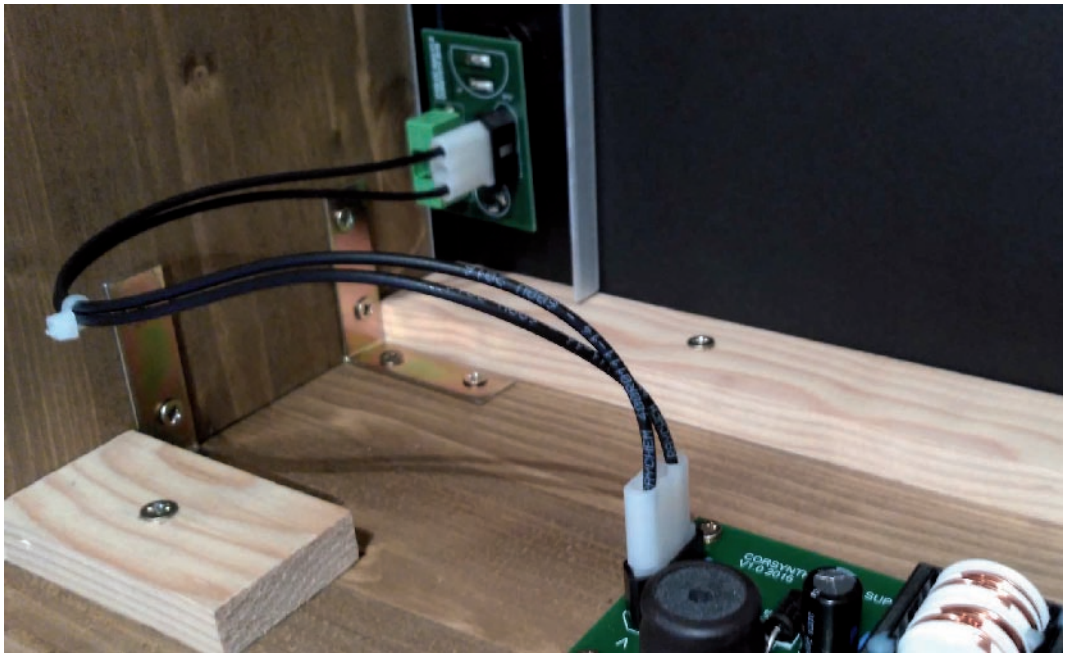
Using the provided spacers screw the DC / DC board and the Distribution board to the cabinet. Don't install the boards without the spacers!
In case you want to drill the holes in your cabinet to install the boards you can find the templates with the holes distances and diameters in the page 8 of this manual.





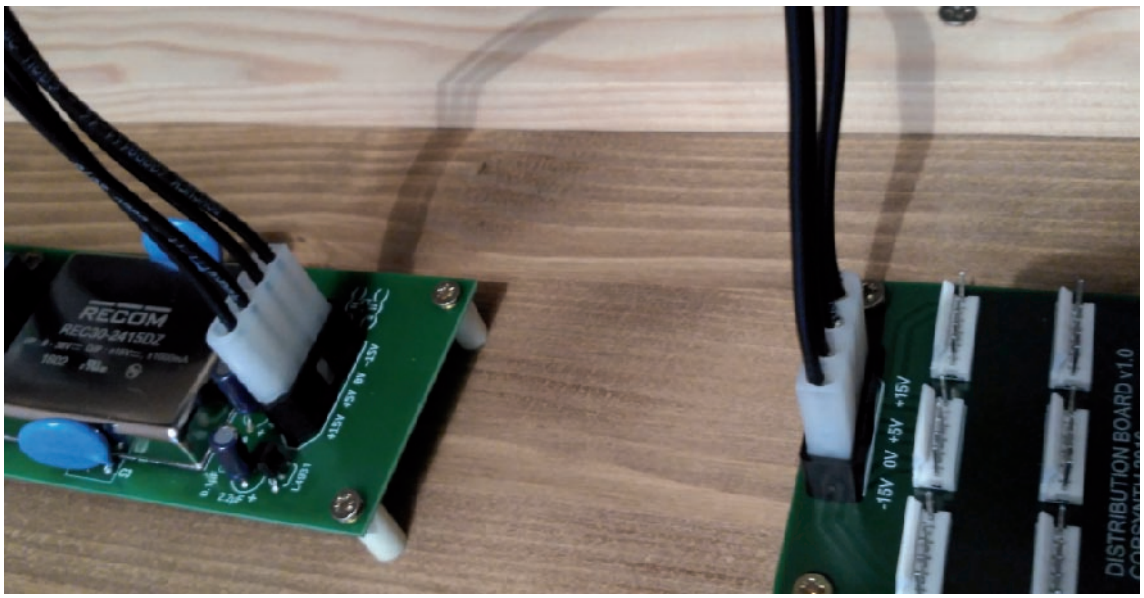
STEP 3

Connect the DC / DC converter board to the C100 Power modules using the connector with two cables. The connector is keyed so is not possible to connect it backwards.



STEP 4

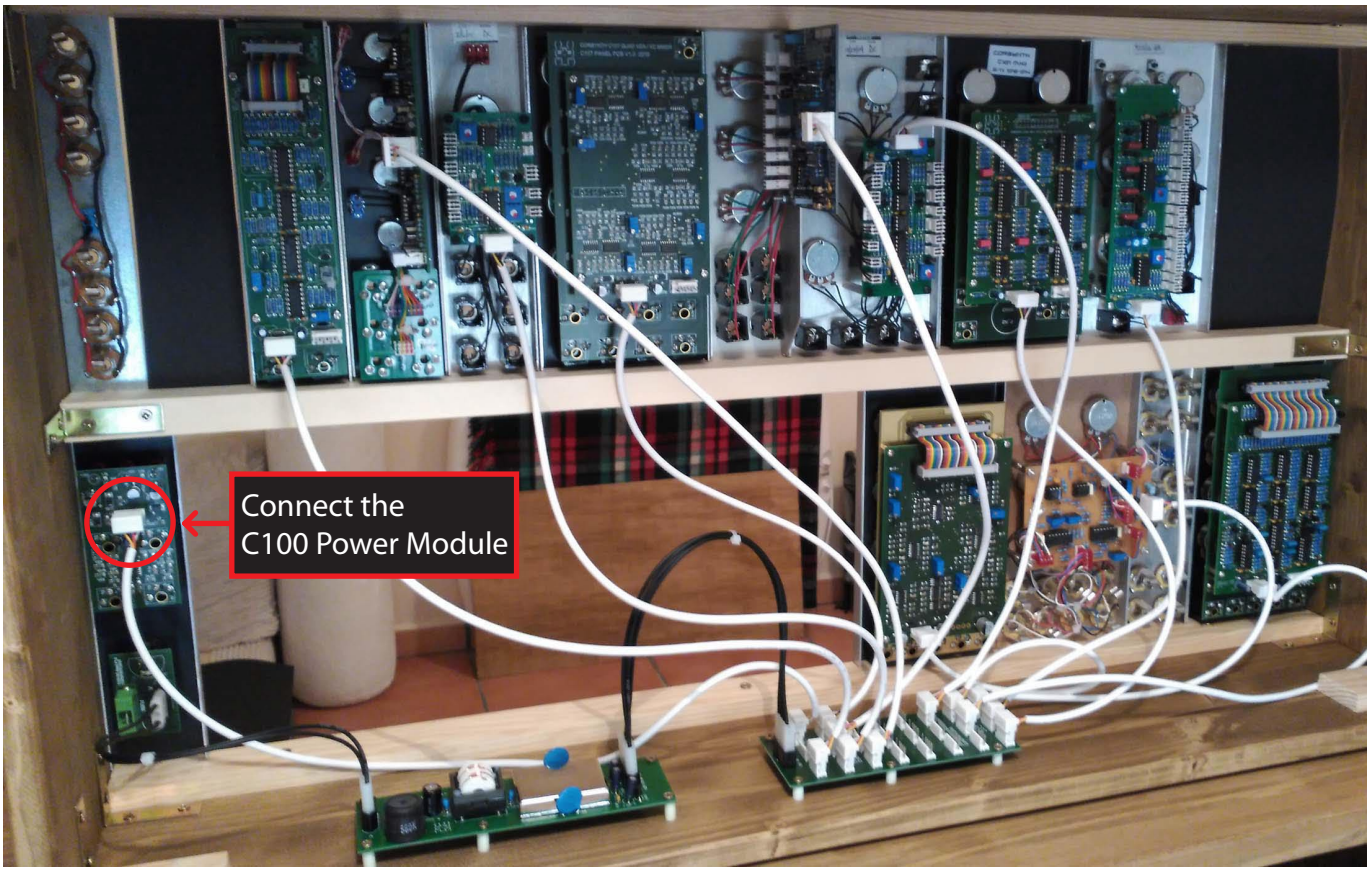
Connect the DC / DC converter board to the Distribution Board using the connector with 4 cables. The connector is keyed so is not possible to connect it backwards.



STEP 5

Connect de modules to the distribution board using the white cables.

Don't forget to conect the C100 Power Module to the distribution board!



STEP 6

- Connect de external brick PSU to the DC input located in the front panel of the C100 Power Module.
- Connect the power supply to the wall socket and turn on the C100 Power Module.

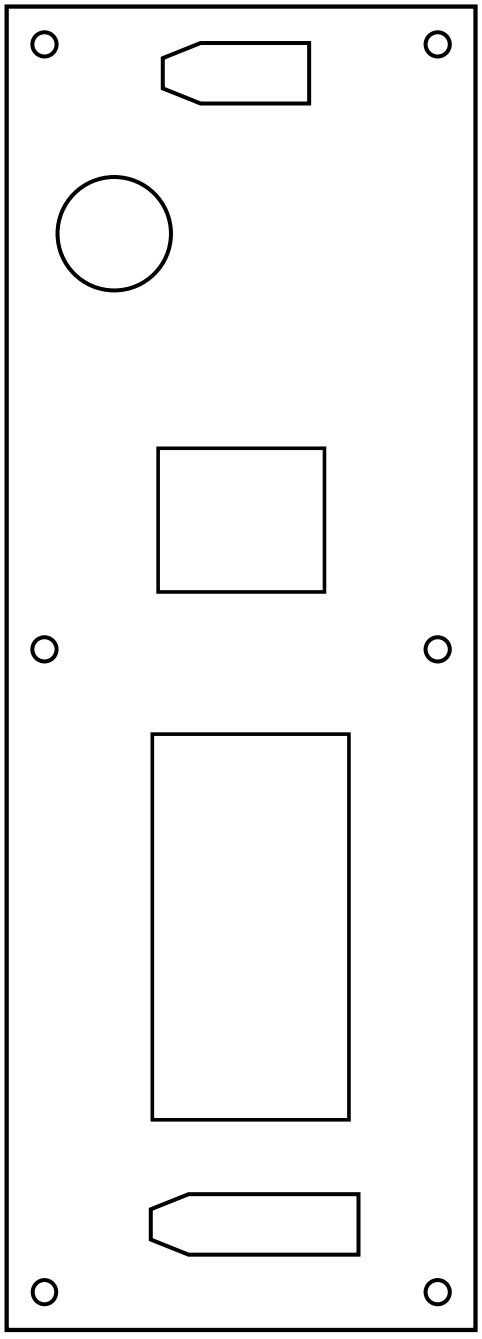
The power supply leds indicators should turn on. In case they don't , turn off the C100 Power Module and check if everything is connectd as has been indicated in this installation guide.

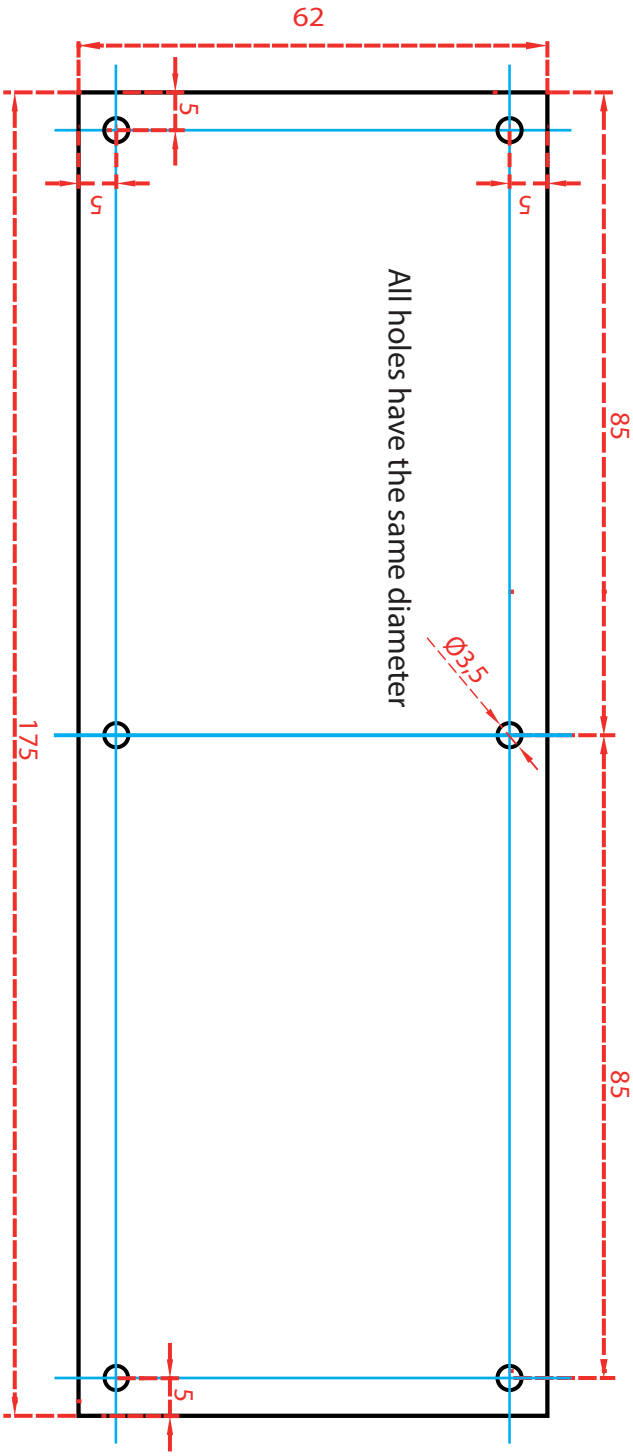
DRILLING TEMPLATES

These templates are provided in case you want to drill your case to install the C100 Power System. All measures are in millimetres. If you print this template be sure that it's printed in its original size. You can place the board in the top of the paper and check if the holes align perfectly.

DC / DC CONVERTER BOARD v2.0

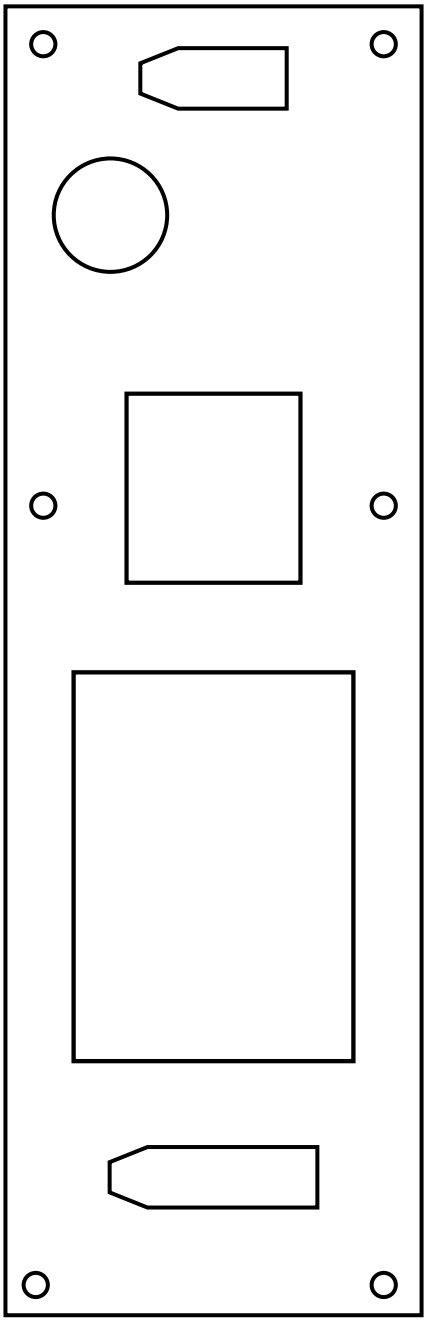
This template corresponds with the DC/DC Converter Board v2.0. If your DC/DC Converter Board is version 1.0 please go to page 9.

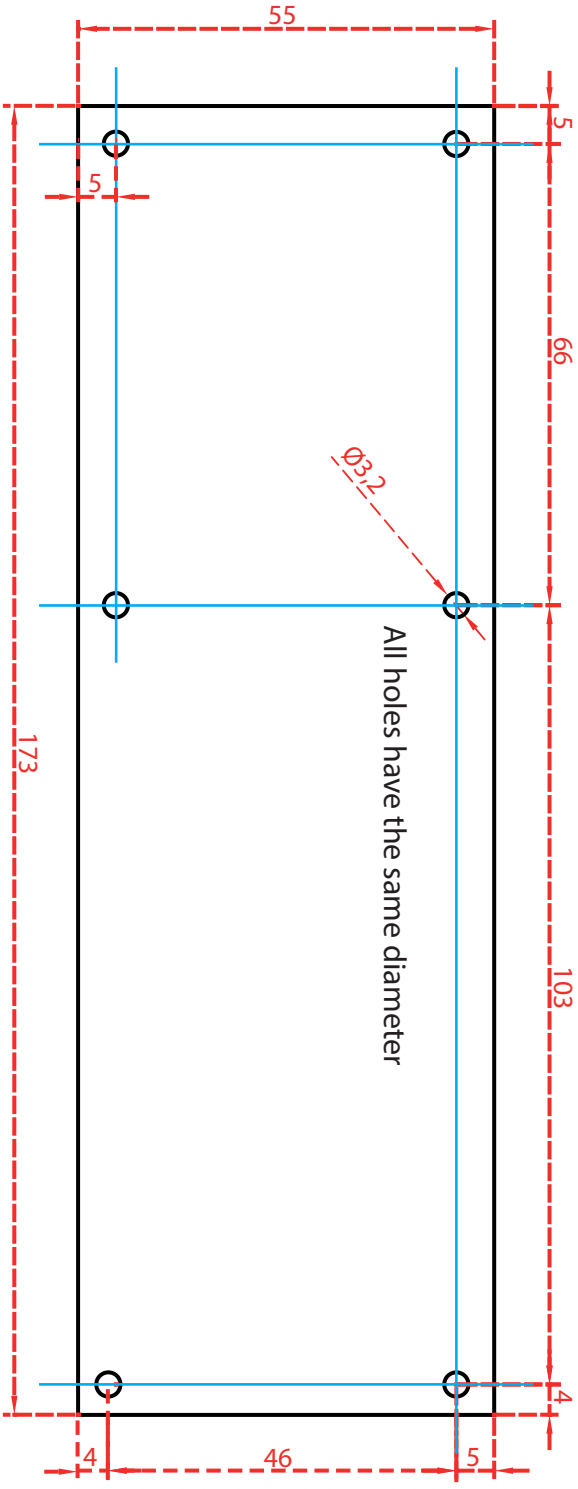




DC / DC CONVERTER BOARD 1.0

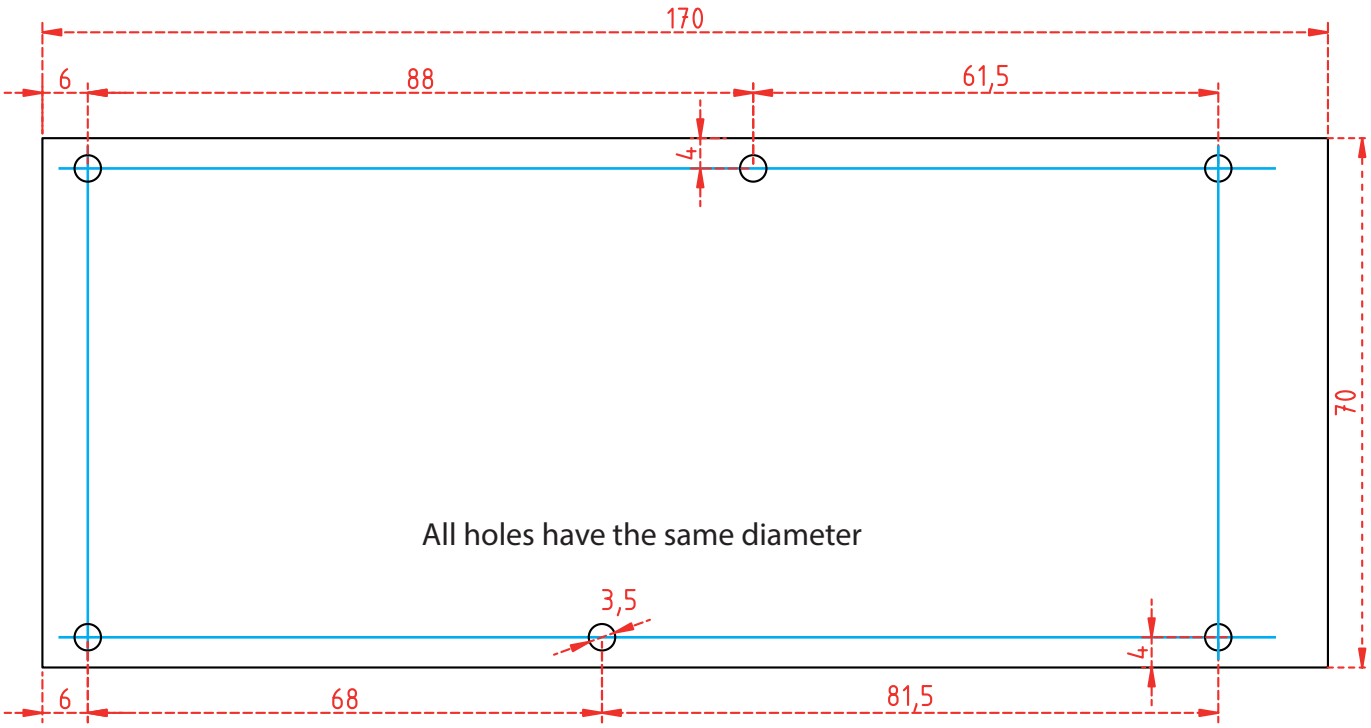
This template corresponds with the DC/DC Converter Board 1.0.
If your DC/DC Converter Board is version 2.0 please go to page 8.

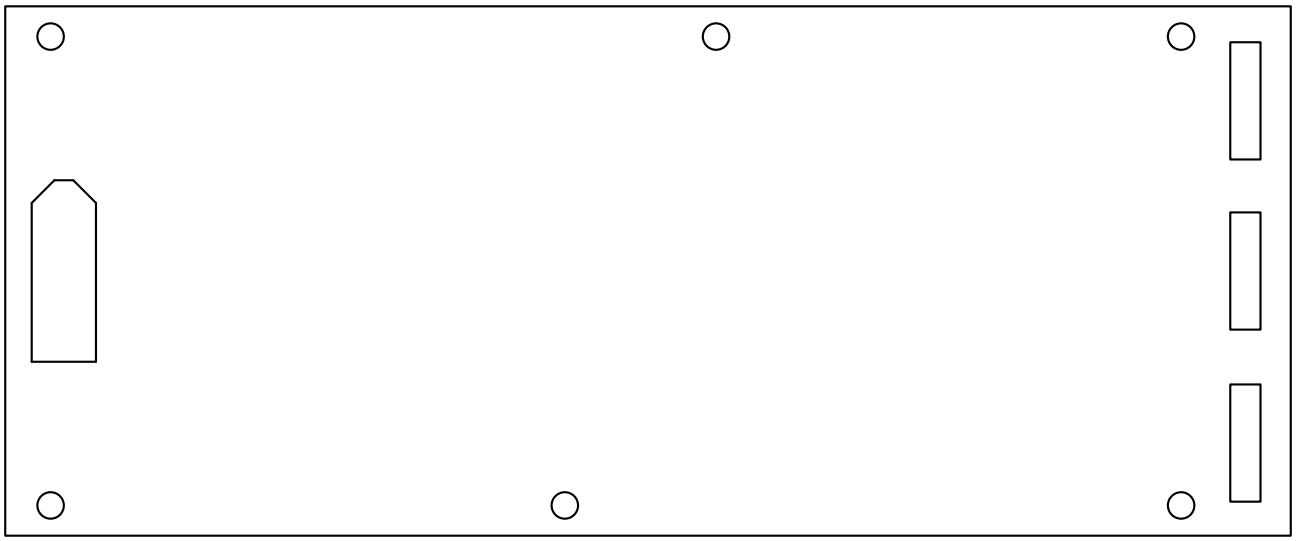




DISTRIBUTION BOARD

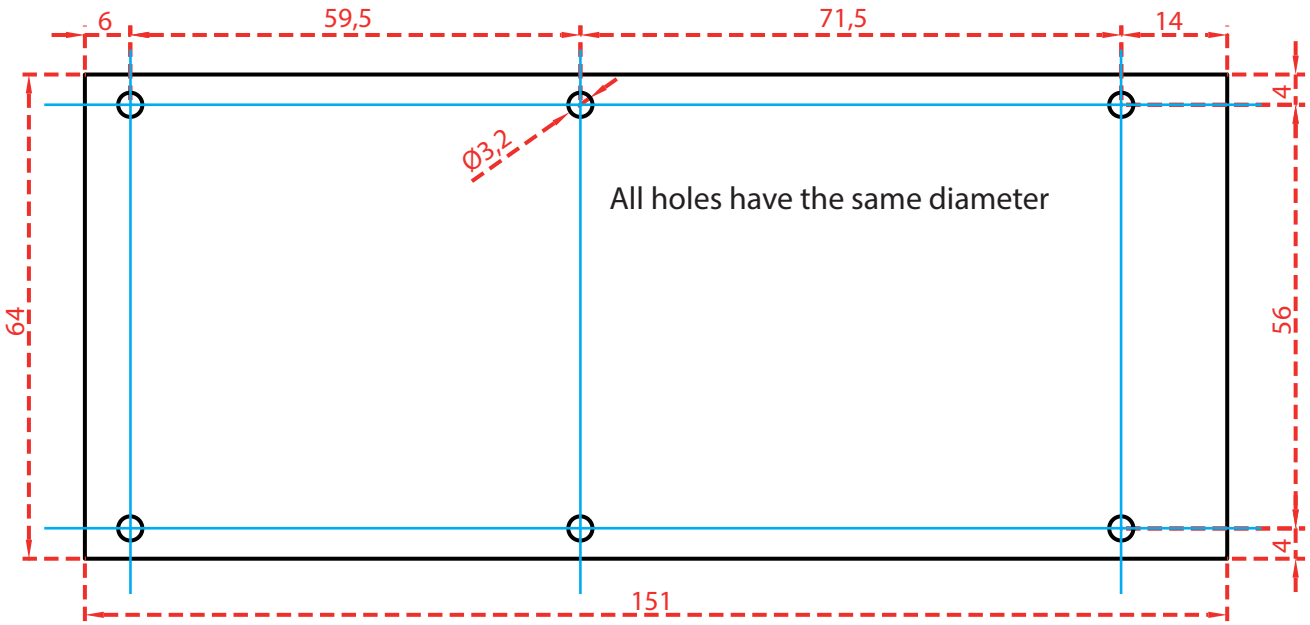
This template corresponds with the Distribution Board v1.5
If your Distibution Board is version 1.0 please go to page 11.

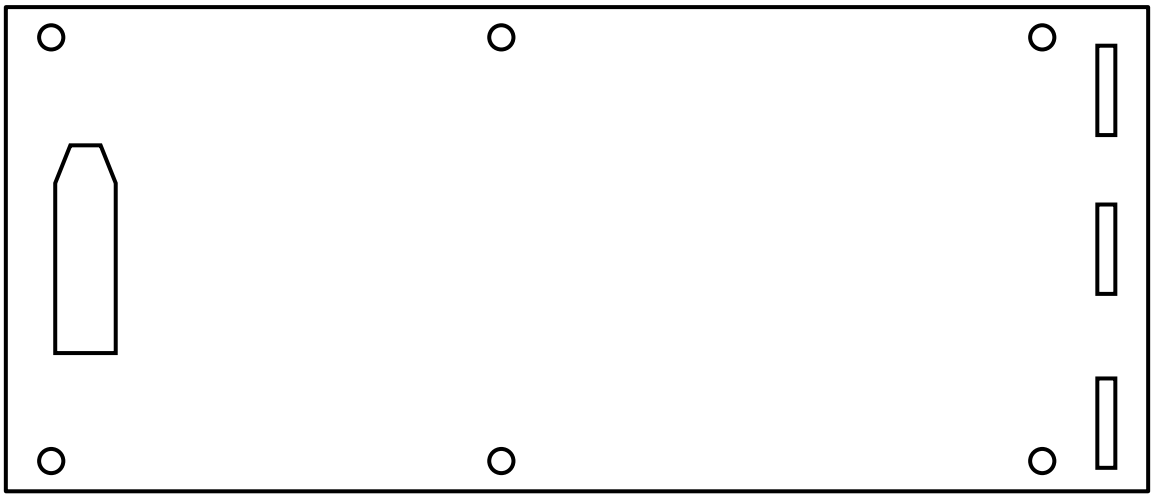


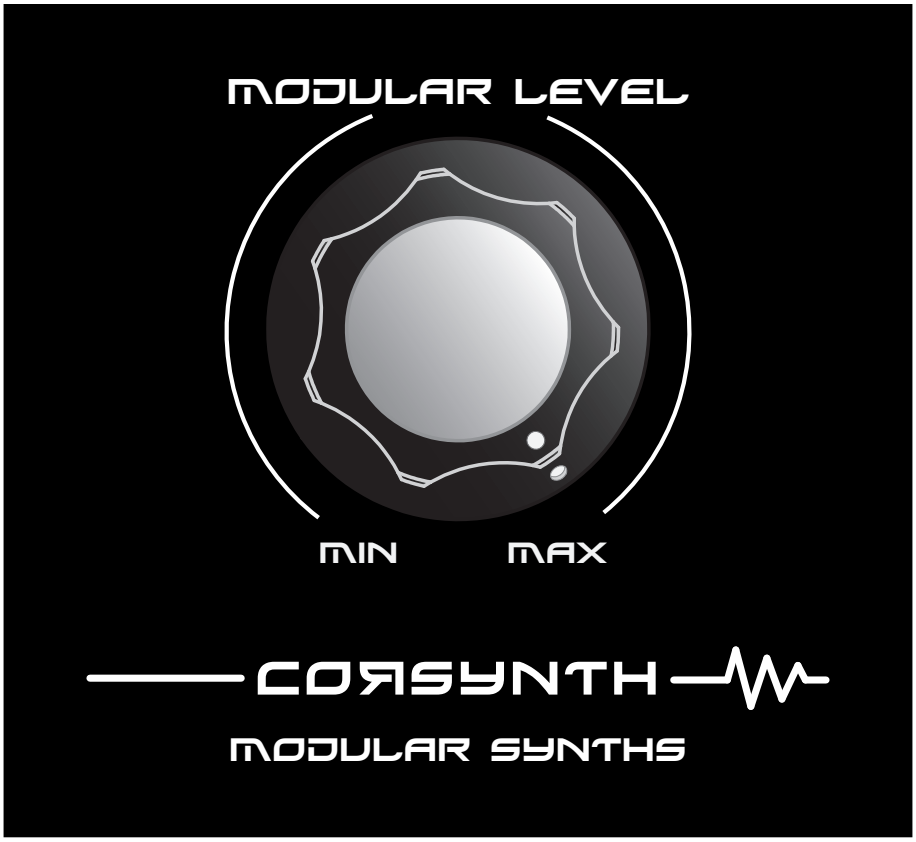


DISTRIBUTION BOARD v1

This template corresponds with the **Distribution Board v1.0**






MODULAR LEVEL
MIN
MAX
CORSYNTH
MODULAR SYNTHS