

Dear RT-311 customer,

Congratulations on purchasing the Swarm Oscillator RT-311. This module offers possibilities far beyond the scope of a normal oscillator. Nevertheless, on request it can behave like an analog module. Please refer to the installation instructions on the back of this manual. After switching it on, it is automatically in this operating mode, which we call the "MANUAL" mode. The mode LED lights up green to indicate this mode. A good starting point for the first experiments you can see here:



The output of oscillator 1 is at OUT1. The pitch is controlled by the 1V / Octave input.

Settings you like can be saved directly as snapshots. To do this, use the Big Knob to select a memory location and press the SNAP-button to the left of the Big Knob. The memory space turns green.

To access the snapshots, switch to Cycle mode. To do this, press the MODE/SHIFT-Button. The LED above is now red. If the LED lights are moving, set the SPREAD and SPEED knobs to 12:00 as shown in the figure above. Now you can blend over the different snapshots with the Big Knob.

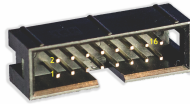
All further information can be found in our RT-311 manual and workshop videos under the following link:

<http://www.joergschaaf.de/wordpress/rt-311-english/>

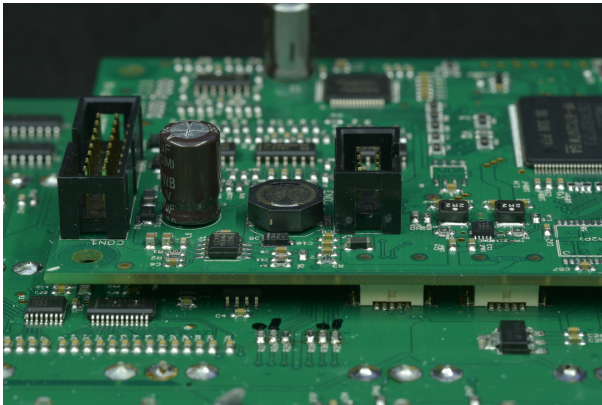
Einbau des RT-311 Moduls in ein Eurorack Gehäuse:

Before going into the detailed consideration of the RT-311 features, we first look at the installation in the Eurorack housing. Before you begin installing the module, you should disconnect the power plug or the power supply.

Next, you will need to measure the power requirements for all modules installed in the enclosure plus the new RT-311 Oscillator (12V 250mA, -12V 80mA). To estimate the current consumption, simply sum positive currents of all modules and then all the modules negative currents. The power requirement of all modules should be below the specifications of the housing power supply.



In the Eurorack world a 16-pin IDC connector system has prevailed. In the illustration above you see a typical 16-pin box connector plug, but unfortunately it is not used by all manufacturers. The good thing about such a plug is that you can connect the IDC sockets of a flat ribbon cable only in one direction with the plug. IDC sockets have a "nose", which must be inserted into the box connector as seen above - and of course this only works with correct alignment. But even more important - the delicate pins of this plug connection are protected against mechanical loads with the help of the box. On "bended" follows quickly "break", if one tries to bend the pins into shape multiple times.



The RT-311 module consists of two PCB boards that are stacked on top of each other. The smaller board is the DSP circuit board, the larger carries the controls and is bolted to the front plate. Before installing the module in the Eurorack housing, you should check the correct position of the DSP board. Make sure that all circuit board connectors are straight and have a firm hold.

Now take the included flat ribbon cable and plug it into the 16-pin idc box socket of the DSP board. The 16 pin box socket is easy to recognize (CON1). Make sure that the DSP board is not exposed to unilateral pressure while inserting the idc socket into the box plug, and that the backplane connectors remain in place.



Once you have connected the cable, you can place the module in the correct position and install it using the enclosed screws and washers. Please use the plastic washers - so you can largely exclude damage to the painting and silkscreening.



Now you can turn on the power. At the same time a few of the LEDs should light up. If this is not the case, interrupt the current immediately and search for the error. Usually however, the oscillator will now work and we can concentrate on the operation.