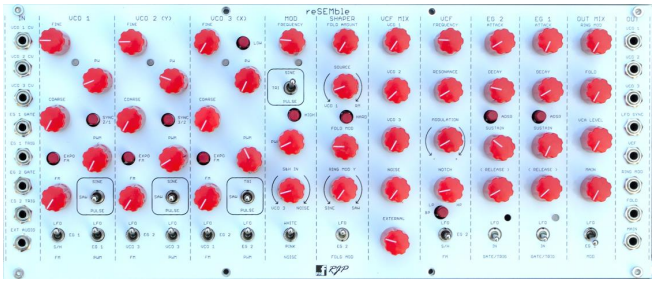
reSEMble V1.2 – Assembly Guide

This guide is for building the reSEMble with 60hp panel. You will need to obtain and understand the Assembly Guides for all the modules that are needed to complete the reSEMble. There are 12 sub modules that comprise the completed voice and a patch board that is used to tie everything together. These are the modules you will need to build to complete the reSEMble:

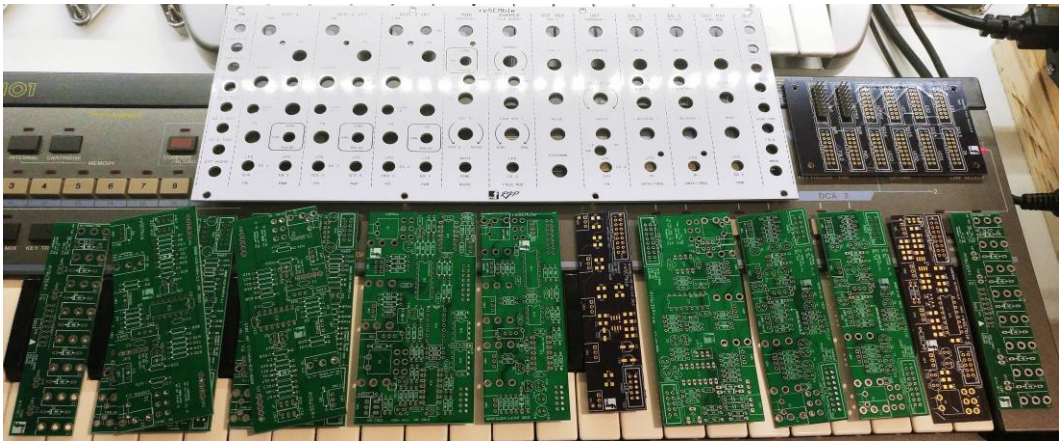
- 60HP screen printed front panel
- PCB: Input board (jacks for input of CVs, Gates, external signal, etc.)
- 6 PCBs: 3 saw core VCOs, one switchable to LFO range
- PCB: Versatile modulation controller with LFO, S&H and Noise
- PCB: Wavefolder with ring modulator
- PCB: 5 channel source mixer
- PCB: Vintage style 12dB state variable VCF
- 2 PCBs: All discrete vintage-synth style Envelope Generators
- PCB: 3 channel output mixer with VCA
- PCB: Output board with 8 jacks to export signals from the reSEMble
- PCB: patch or “bus” board to connect all the modules together



You will also need:

- ten 10X16 Eurorack power ribbon cables.
- a 10 connector flying bus cable, e.g.: https://reverb.com/item/17077888-flying-bus-power-cable
- twelve 16X16 Eurorack ribbon cables. For maximum sound quality we recommend heavy duty cables such as: https://modularaddict.com/parts/cables/premium-eurorack-power-cables
- You will need a –12/0/+12 synth power supply ideally with at least 1A capacity but higher current capacity may be needed depending on other modules that it is supplying.
- The module is designed and sized for **Eurorack** systems.
- If the modules used for input (e.g. CV) and output (e.g. stereo mixer) are on the same power supply as the reSEMble there should be no problems with compatibility. If you are using modules in other racks and/or on other power supplies and/or external keyboards you may need to interconnect the grounds between these systems.

1. Build the individual modules



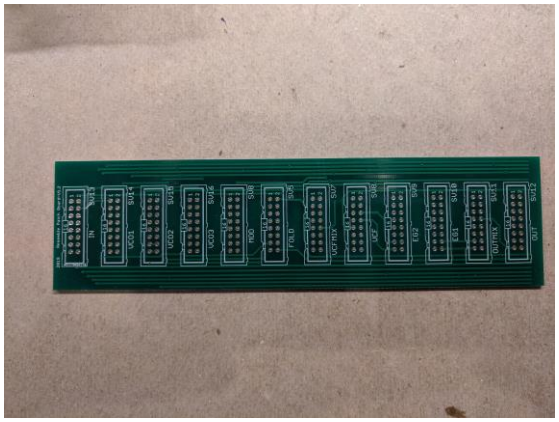
The ideal build plan starts with the patch board followed by the INPUT and OUTPUT boards. With those built and connected to the patch board various external inputs and outputs can be connected to test the other modules.
Following this, if you can get waveforms out of a VCO then it is probably working quite well. Therefore, we recommend building a VCO next and patching it in.
Doing the VCF before the VCF mix though would allow you to test the filter and the resonance since that will all come out of the OUT.
Adding the MOD board allows you to test the LFO on the output panel and then the PWM and FM on VCO1.
Then the VCF mix takes the VCO into the VCF. Then the various remaining modules are added and tested.

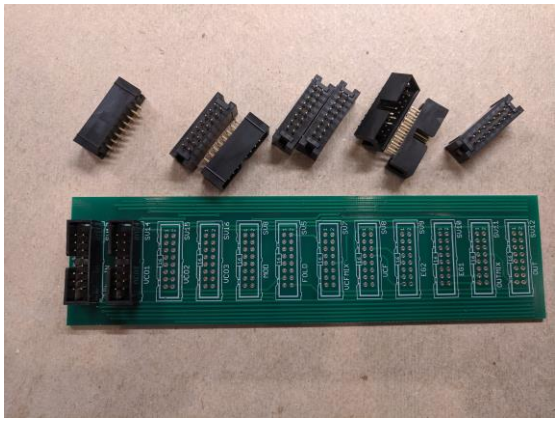
2. Recommended build order

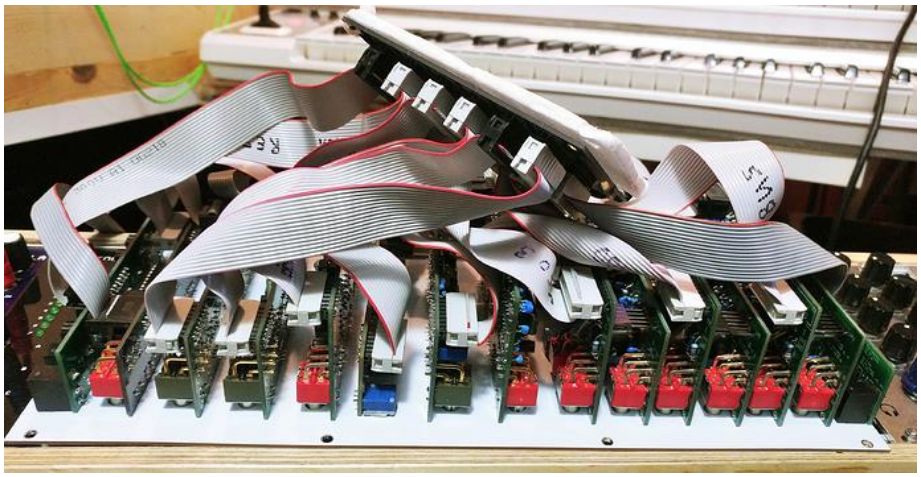
   In summary, this is the recommended build order:

   - Bus Board
   - In
   - Out
   - VCO1
   - VCF
   - MOD
   - VCO2
   - VCO3
   - Shaper
   - VCF Mix
   - Out Mix
   - EG1
   - EG2

   As each module is completed it can be connected to the bus board and the power supply and tested.







3. Install the ribbon cables

   The 16-16 cables go from each module to the labeled header on the bus board. It is very important to connect the modules to the correct header and in the correct orientation.

   The 16-10 cables go to the power headers on the flying bus cable.

   The flying bus cables connect to the synthesizer +12/0/-12 power supply.

4. Install the knobs and the switch caps.