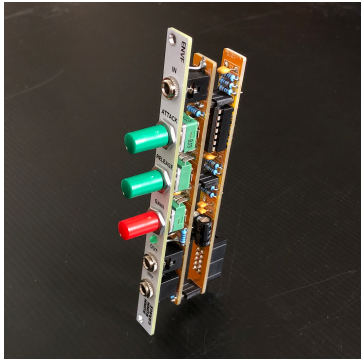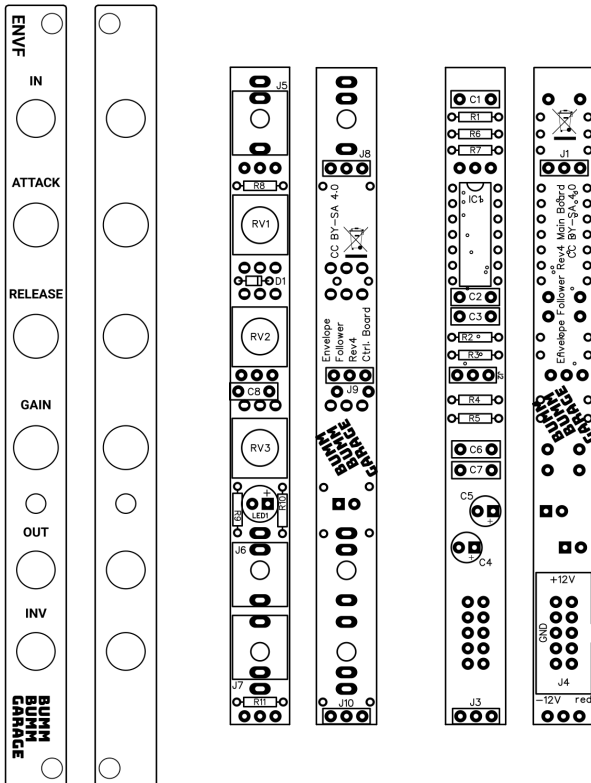# Build Doc: Envelope Follower (ENVF)

I designed this 2hp envelope follower for my techno rack. My main stakes are being able to side chain and create duckings on voices when the kick hits.

Have fun with it! Steffen.

1. Build The Module

Take a look at the pictures of the assembled module on the project page: https://www.bummbummgarage.com/modules/envelope-follower. Make yourself a plan of how you want to proceed.
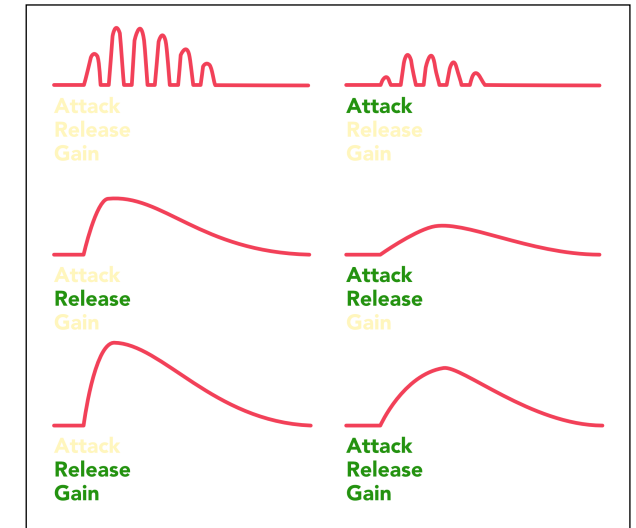
There are three basic principles I follow for worry-free assembly of a module:

1. **Test each component** if you can. The time you spend doing this costs so much less than the uncertainty when something is not working somewhere. If you don't have a multimeter yet, I recommend you to get one and learn how to check electronic components.

2. **Start with the flattest components** (diodes, resistors) and build your way up (capacitors, IC holders, potentiometers). This way each component will lie flat when you flip the board over for soldering.

3. **Fix control elements to the front panel before soldering them**. To do this, place the components (pots, audio jacks, LEDs, etc.) in the holes provided and put the front panel on top. You don't solder them yet, but fix them with the appropriate screws at the front first. Then you solder. This prevents tensions during the final assembly, which could possibly break the solder joints.

A speciality of this module is the **installation of the potentiometers** due to their limited space: Straighten the support arms with a pair of pliers. Then bend them under the housing of the potentiometer so that they lie flat against it and do not make contact with the PCB surface.

2. Have Some Envelope Fun

Each of the controls has certain influence on the envelope:

For a quick start, here are two ideas for using the envelope follower. These are the main use cases I followed when developing the module:

1. **Sidechaining on bass line**: https://youtu.be/aDxRjQ9Nlts

2. **Bass line from hihat beat**: https://youtu.be/DFfUIPmgM-s

3. Send Me Your Feedback

If you have any thoughts, complaints or requests regarding the assembly or the use and sound of the module, please let me know via bummbummgarage@posteo.de

Thank you very much!