

## ADSR Controller Calibration

The original Elektor Formant LFO had -2.5V - +2.5V LFO output, but this version has -5V - +5V, therefore in the AUTO REPEAT mode gate signal goes down to -2.5V. All circuits work well, but technically negative gate is not correct, so, if you wish to eliminate this negative component, you can install voltage divider resistors on the LFO input as indicated in the schematics file.

The only adjustment points are the trimmers R21 and R36, which are used to set the "size" of the gate signal to approx. +4.7 V to +5.0 V. The easiest way to adjust R21 is to set the LFO to the maximum period (= minimum frequency) and press a button at the same time (SW1 in the EXT-GATE position).

R21 can then be easily set to the value required to reliably "start" the ADSR envelope generators. R36 is also set to +4.7 V to +5.0 V with the button pressed and the delay time at a minimum.