To calibrate the lollipop using the three variable blue pots on the lower board, do as follows:

****these pots are labelled on the underside of the board****

Minimising CV bleed on the FET channel

Plug a simple audio signal such as a sine wave into the input and turn up the in gain.
Supply a unipolar** square wave of sub audio frequency (i.e. an LFO) to the sidechain input and turn the sidechain control on the front panel to full. Switch to the FET mode, turn the ratio all the way up (hard right) and the dry/wet to hard right – 100% wet. Turn the attack and release to 0 (hard left) and the threshold to full (hard left). You should see the LED indicator pulse all the way on and all the way off as the signal to the sidechain changes. Plug the output into your chosen monitoring device and turn the out volume up – make sure the volume out is not clipping, this will obscure the measurement. You should hear clicking in the output from the sidechain in – change the 'offset' pot to minimise the sound.

**The sidechain responds to 0-5v waves but bipolar -V to +V waves will not trigger the sidechain properly.

Matching the FET / Vactrol level

The FET level pots are used to match the volume of the FET channel to the vactrol channel. Although there will never be a perfect match between the two channels – their characteristics are fundamentally different – we obtain a reasonable match by matching the volume with no compression and full compression, although you can pick any two other points to match to, or indeed leave the calibration entirely – but it is recommended for best results.

1. Plug in an audio source and set the controls as follows: Ratio all the way to the right, threshold all the way to the left, attack and release all the way left, dry/wet fully right. Turn the input volume up all the way until the every LED on the indicator is fully lit – maximum compression. Monitor the output and listen – make sure you can hear the output volume. Now turn the ratio all the way down and the LED bar should go off completely – no compression – you may need to adjust your monitor volume as you go between these two states so you can hear the sound fully and not blow your ears.

2. With no compression – ratio hard left – flick between the FET and vactrol modes to hear the difference in volume, then whilst in the FET mode, adjust the 'FET trim 1' trimmer to change the volume, flick back to the vactrol mode and hear the difference between the channels. Continue until the volume is roughly equal –

3. Then, turn the ratio until the all LEDs are lit and compare the volumes. If there is a difference, adjust the 'FET trim 2' pot to match as close as you can - don't worry if the volume is not exact, all FETs are different and sometimes it is not possible to match these exactly, as long as the volumes are roughly equal it will be fine. After you alter the 'FET trim 2' pot, go back and repeat step 2 and 3 until both settings match. This process should be fairly quick.