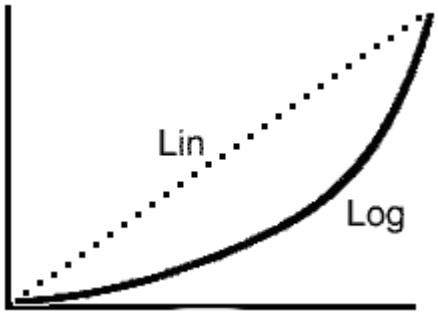
BugBrand WOM PRO Supplement
October 2010

The WOM PRO uses *exactly* the same circuit as the regular WOM kit, but due to the use of improved potentiometers which have a slightly different 'footprint', I have had to move some of the other components around a bit!

The stages of building remain basically the same as documented in the main WOM Building Guide, except that the potentiometers are added at a later stage (due to their height) – they are now added near the end, just before the battery case. Please consult the BOM and Parts Placement diagram in the Extra Materials section.

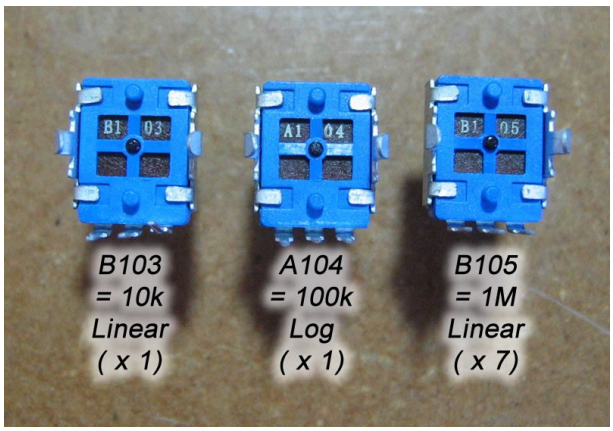
Improved Potentiometers:

One thing I didn't mention before was that potentiometers generally come in two different types – Linear (Lin) and Logarithmic (Log). This determines their 'feel' in the circuit and we generally use Log pots for audio level controls and Lin pots for most other applications.



(I didn't want to load on extra info because all the mini-dials used in the basic WOM kit are simple linear response types!)

We need to identify which pot is which and to do this we examine their undersides where we see a letter and three numbers.



The letter corresponds to the pot response:
A = Logarithmic & B = Linear

The numbers are read in the same manner as we used for the capacitors:
103 = 10 + 3 zeros = 10,000 = 10 k ohms
104 = 100 k
105 = 1 Meg

You will find that there are seven of the B105 / 1 M Lin pots and one each of the other two.
- 10k B is used for Tone
- 100k A is used for the final Output Level
- 1M B are used for the Oscs, their levels and the Starve control.

Note that the pots have three legs at the front, plus an extra two larger legs on the side – these just add strength and stability.

Question – why do we use 1M B pots for the mixer section? Shouldn't we use Log pots?
Answer – usually you would use Log pots (typically 100k A), but in this case using 100k pots would upset the oscillators and I chose to use Lin pots to keep the kits simple!

One final touch for completion – you can add a very small dab of paint (eg. Enamel) into the little indicator line indentation. A good applicator for this is one of the pieces of wire cut off the resistor legs.