

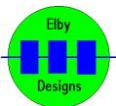


## ES07 – 1973 VCF

### Construction Guide

Revision 1.1

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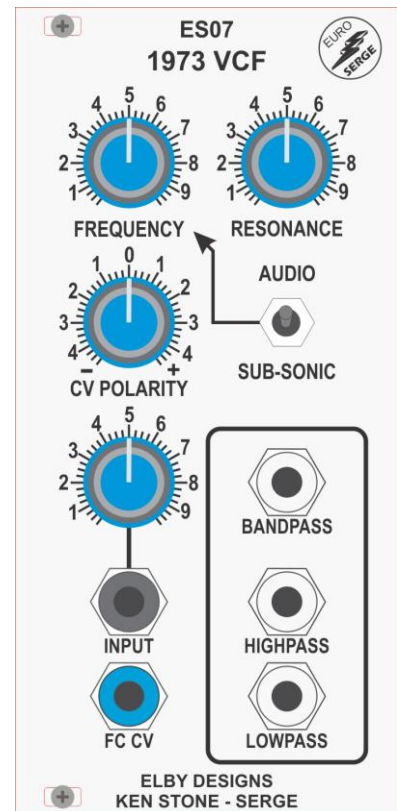
# ES07 – 1973 VCF

Construction of the ES07 requires the assembly of 3 separate boards:-

1. Column 1: Panther Support 5 PCB ([3D Model](#))
2. Column 2: ES07 Column 2 PCB ([3D Model](#))
3. Main Board: ES07 PCB ([3D Model](#))

Constructors should refer to the printed Component Overlay for any specific comments regarding the board assemblies, the Bill of Materials for the current value of all components and [General Construction Notes](#) for general pcb assembly guidelines. You are advised to check all of these documents on our website to ensure you have the latest copy.

1. Assemble the 6 Carrier Board assemblies
2. Fit all components to the boards following normal assembly guidelines except for the sub-assemblies
3. Place the 2x jack sub-assemblies on the Column 1 PCB and offer up to the panel securing using the supplied nuts. Some of the sub-assembly boards may be a little wide and butt up against each other, in this case just tilt both boards slightly so that they hang freely
4. Solder the sub-assemblies in to position
5. Place the 3x jack sub-assemblies and 1x switch sub-assembly on to the Column 2 PCB and offer the assembly up to the panel
6. Fit the Main Board to ensure correct alignment of the Column 2 PCB and secure the assembly using the supplied nuts
7. Solder the 3x jack and 1x switch sub-assemblies



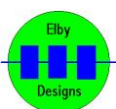
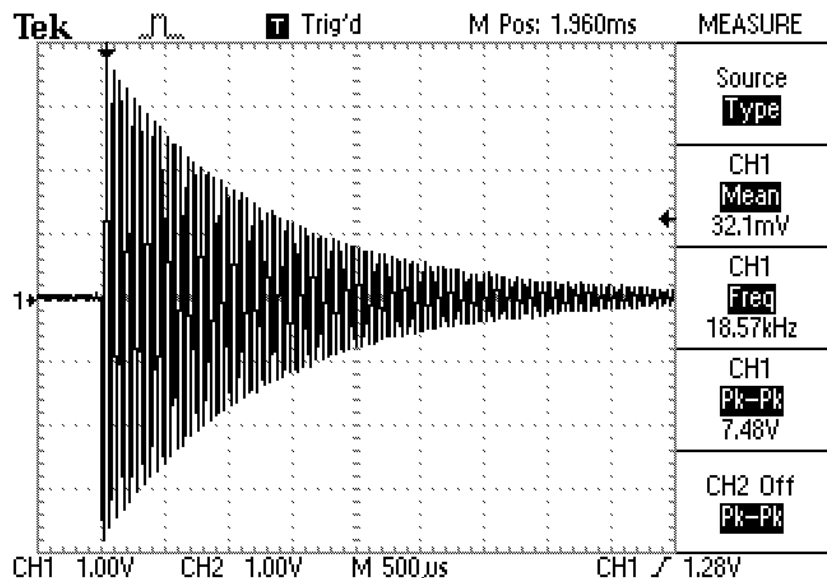
## Calibration

Equipment required:-

1. 12Hz 5VDC p-p square wave

Calibration procedure:

1. Select [AUDIO]
2. Set [FREQUENCY] to maximum
3. Set [RESONANCE] to '5'
4. Set [CV POLARITY] to '0' and [INPUT] to maximum
5. Patch the square wave in to [INPUT]
6. Monitor the [BANDPASS] output
7. Increase [RESONANCE] until the filter starts to ring - approximately '9'
8. Adjust P101 for a frequency of 19kHz



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