

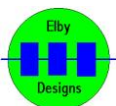


ES15 Smooth & Stepped Generator

Construction Guide

Revision 1.0

March 15th, 2016



Elby Designs - Laurie Biddulph

9 Follan Close, Kariong, NSW 2250, Australia

elby_designs@ozemail.com.au <http://www.elby-designs.com>

ES15 Smooth & Stepped Generator

Construction of the ES15 requires the assembly of 5 boards:-

Column 1 - Panther Jack PCB ([3D Model](#))

Column 2 - Panther Pot PCB ([3D Model](#))

Column 3 - Panther Jack LED PCB ([3D Model](#))

Column 4 - Panther Jack LED PCB ([3D Model](#))

Backboard - ES15 PCB ([3D Model](#))

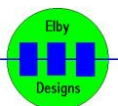
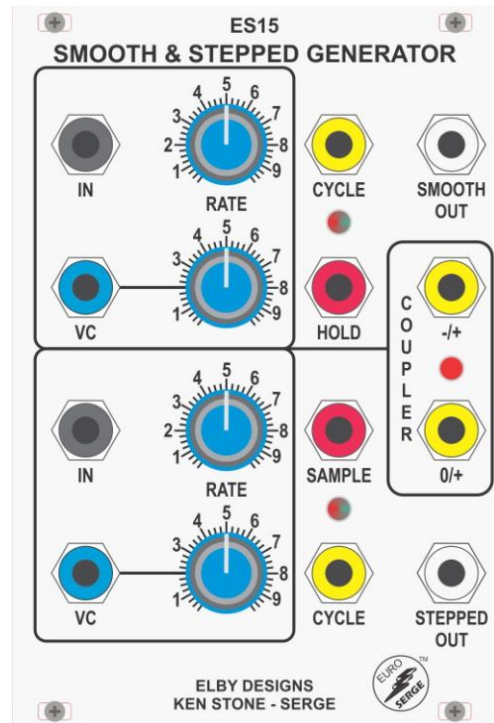
Constructors should refer to the printed Component Overlay for any specific comments regarding the board assemblies, the Bill of Materials for the current value of all components and [General Construction Notes](#) for general pcb assembly guidelines. You are advised to check all of these documents on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

1. Fit all components to the boards following normal assembly guidelines except for the LEDs
2. Mount the Column 3 assembly to the front panel and secure firmly using the supplied nuts for the 2 outer jacks
3. Form and install the 2 LEDs and solder in to place
4. Remove the assembly from the panel
5. Mount the Column 4 assembly to the front panel and secure using the supplied nuts for all jacks.
6. Form and install the LED and then solder in to place
7. Mount the other assemblies to the front panel
8. Mount the backboard ensuring the correct alignment of the IDC connectors

Calibration

Equipment required:

1. 10kHz 4VDC p-p square wave
2. 10Hz 5VDC p-p square wave
1. Set all controls to minimum
2. Patch [SMOOTH CYCLE] to [SMOOTH IN]
3. Monitor [SMOOTH OUT]
4. Adjust P301 for 100Hz
5. Patch 10kHz square wave signal in to [STEPPED SAMPLE]
6. Patch [STEPPED CYCLE] to [STEPPED IN]
7. Monitor [STEPPED OUT]
8. Adjust P401 for 100Hz
9. Monitor [SMOOTH OUT]
10. Patch 10Hz square wave signal to [HOLD]
11. Confirm that [SMOOTH OUT] is cycling ON and OFF



Elby Designs - Laurie Biddulph

9 Follan Close, Kariong, NSW 2250, Australia

elby_designs@ozemail.com.au <http://www.elby-designs.com>