ES06 Envelope Generator

Construction Guide

Revision 0.4

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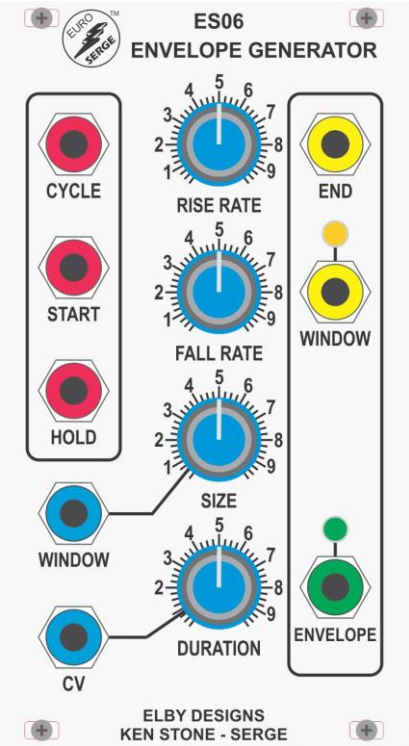
ES06 Envelope Generator

Construction of the ES06 requires the assembly of 4 separate boards:-

Column 1 - ES21 Support PCB (3D Model)
Column 2 – ES06 Column 2 Pot Support PCB (3D Model)
Column 3 - Panther Jack LED PCB (3D Model)
Main Board - ES06 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 document for general pcb assembly guidelines. You are advised to check all of these documents on our website to ensure you have the latest copy.



Assembly

1. Fit all components to the Support Boards except for the 2 LEDs J301E and J301G in Column 3.
2. Mount the Column 3 assembly on to the Front Panel
3. Install and solder the 2 LEDs
4. Mount the 2 remaining Support Boards to the Front Panel
5. Fit all components to the Main Board except for the 3x IDC sockets J101, J201 and J301
6. Mount, but do not solder, the 3 Receptacle sockets
7. Lower the Front Panel assembly on the Main Board ensuring that the IDC sockets are correctly aligned
8. Solder the IDC sockets in to place

Addendum

R402 has been replaced by a zener diode. See 3D Model for correct orientation

Calibration

1. Set [RISE RATE] and [FALL RATE] to maximum and all other controls to their minimum position
2. Adjust P204 until TP1 measures 10.0V
3. Patch [END] to [CYCLE]
4. Monitor the [ENVELOPE] output
5. Set [RISE RATE] and [FALL RATE] to around ‘2’
6. When the waveform is around 2.5V apply a DC voltage of 5V to [HOLD]
7. Adjust P101 for minimum drift