

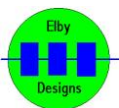


ES24 4-Stage Programmer Extension

Construction Guide

Revision 1.0

March 5th, 2016



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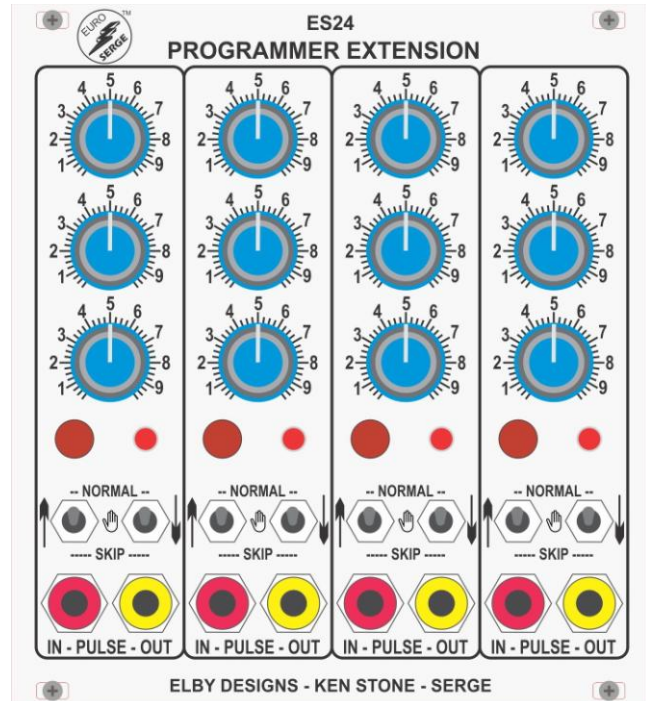
ES24 4-Stage Programmer Extension

Construction of the ES24 requires the assembly of 5 boards:-

- Column 1 - ES24 PCB (3D Model)
- Column 2 - ES24 PCB (3D Model)
- Column 3 - ES24 PCB (3D Model)
- Column 4 - ES24 PCB (3D Model)
- Backboard - ES24 Back Board PCB (3D Model)

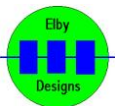
Constructors should refer to the printed Component Overlay for any specific comments regarding the board assemblies, the Bill of Materials for the current value of all components and [General Construction Notes](#) for general pcb assembly guidelines. You are advised to check all of these documents on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

1. Mount 4x jack J102 and 4x switch S101 to the 8x Carrier boards
2. Prepare the 4x D103 LEDs as per the instructions given below
3. Fit all components to the 4x ES24 Stage boards except for D103, S102 and S103 and the sub-assemblies
4. Mount S102 and S103 on to one of the ES24 assemblies and offer up to the front panel. Secure with a single nut on the central pot and a nut on the jack.
5. Secure S102 and S103.
6. Flip the board over and trim the ferrules to near flush with the pcb
7. Solder the ferrules in to place
8. Remove the assembly and repeat for the remaining 3x assemblies.
9. Starting with 'Stage 1', mount the S102 and S103 sub-assemblies and offer the assembly up to the front panel and secure using the appropriate nuts
10. Ensure that the body of S102 is parallel to the pcb and solder the 2 sub-assemblies in to place.
11. Install the LED assembly
12. Repeat for the remaining 3 columns
13. Assemble the Back Board and mount on to the column boards



Calibration

The ES24 does not require calibration



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Preparing D103

Form the legs of the LED to 90 degrees approximately 5mm from the body.
Take care to note the orientation of the LED with respect to the main PCB.
Solder the LED in to the D1 position on the LED Carrier PCB

