

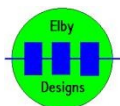


ED102 Octave-Volts-Hertz

Construction Guide

Revision 1.0

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ELBY Designs - Laurie Biddulph

3 Therese Street, Bridport, TAS 7262, Australia

elby-designs@bigpond.com <http://www.elby-designs.com>

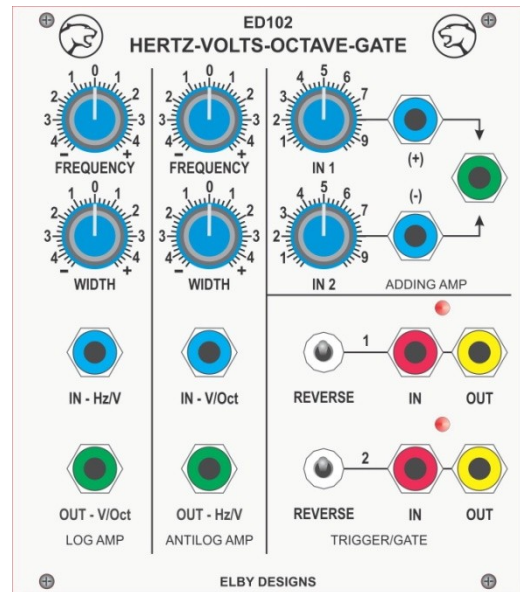
Panther Series – ED102 Hertz-Volts-Octave-GATE

Construction of the [ED102](#) requires the assembly of 5 boards:-

- Column 1 - Panther Pot PCB ([3D Model](#))
- Column 2 - Panther Pot PCB ([3D Model](#))
- Column 3 - Panther Pot PCB ([3D Model](#))
- Column 4 - ED102 PCB ([3D Model](#)) ([PCB Overlay](#))
- Main - ED102 PCB ([3D Model](#)) ([PCB Overlay](#))

Constructors should refer to the PCB Overlays 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.

1. Populate the 7x Jack Carrier Boards ([3D Model](#))
2. Populate the 2x Switch Carrier Boards ([3D Model](#))
3. Start by building the 3 Panther Support boards and check that they fit the Front Panel.
4. Populate the main board.
5. When fitting the TEMPCOs ensure that the body of the TEMPCO sits firmly against the body of the IC to maximise thermal contact. Use thermal past if available
6. Place the populated Carrier Boards on to their headers and offer the assembly to the front panel and solder in to place.
7. Fit the 2 LEDs.



CALIBRATION

Remove any input signals.

To complete calibration you will require an accurate 1.0V and 4.0V reference source.

ADDING AMPLIFIER

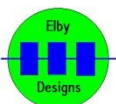
- Set [IN 1] and [IN 2] to their minimum position
- Monitor the [OUT] connector (J304) and adjust P303 for 0.0V

ANTILOG AMP

1. Set [FREQUENCY] and [WIDTH] to their centre positions
2. Monitor [OUT Hz/V]
3. Apply 1.0V to [IN – V/Oct]
4. Adjust [FREQUENCY] for 1.0V output
5. Apply 4.0V to [IN – V/Oct] and adjust P201 for 8.0V
6. Repeat steps (3) to (5) until repeatable results are obtained

LOG AMP

1. Set [FREQUENCY] and [WIDTH] to their centre positions
2. Connect [OUT – Hz/V] to [IN – Hz/V]
3. Monitor [OUT – V/Oct]
4. Apply 1.0V to [IN – V/Oct]
5. Adjust [FREQUENCY] for 1.0V output
6. Apply 4.0V to [IN – V/Oct] and adjust P101 for 4.0V
7. Repeat steps (4) to (6) until repeatable results are obtained



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