

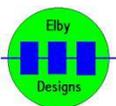


IF101 2Q/4Q

Construction Guide

Revision 1.02

June 27th, 2018



ELBY Designs - Laurie Biddulph

9 Follan Close, Kariong, NSW 2250, Australia

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

IF101 2Q/4Q

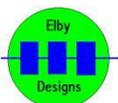
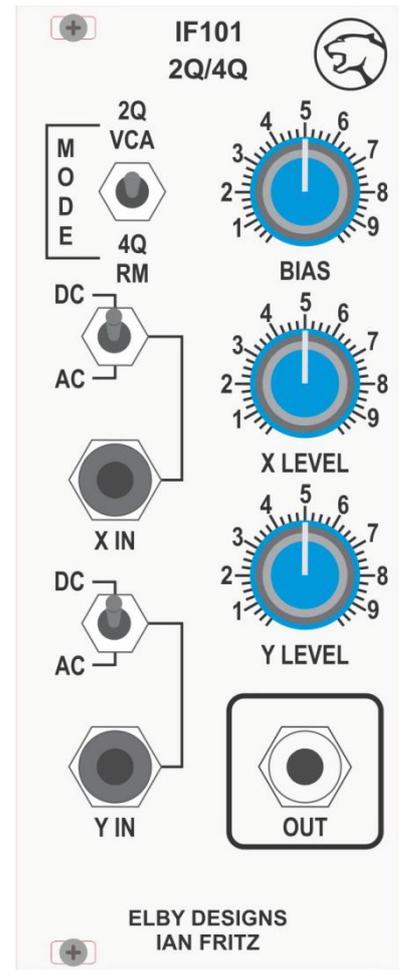
Construction of the IF101 requires the assembly of 2 boards:-

Column 1 - IF101 PCB ([3D Model](#))

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

Constructors should refer to the [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 Carrier Board assembly ([3D Model](#))
2. Fit all components to the boards following normal assembly guidelines except for all the jack sub-assembly
3. Mount the jack sub-assembly to the Column 2 board and then offer the assembly up to the front panel and secure the using the supplied nuts and washers
4. Solder the jack sub-assembly in to place
5. Install the Column 1 board
6. Fit the short IDC cable between the modules



ELBY Designs - Laurie Biddulph

9 Follan Close, Kariiong, NSW 2250, Australia

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

Calibration

This circuit requires balance adjustments for each mode (2Q/4Q) and an overall gain adjustment.

Adjust the X balance

1. Set [MODE] to [2Q].
2. Set the [BIAS] knob fully counter-clockwise.
3. Turn the [X LEVEL] knob fully counter-clockwise.
4. Turn the [Y LEVEL] knob fully clockwise.
5. Set [Y IN] to 'AC'
6. Connect a 200Hz 10VAC triangle wave to [Y IN].
7. Adjust P202 for minimum output.

Determine the bias threshold

1. Set [MODE] to [2Q].
2. Turn the [Y LEVEL] knob fully counter-clockwise.
3. Turn the [X LEVEL] knob fully clockwise.
4. Connect a 200Hz 10VAC triangle wave to [X IN].
5. Adjust the [BIAS] knob to just below the point where the VCA starts to turn on. This is called the "threshold point".

Adjust the Y balance

1. Leave the [BIAS] control at the "threshold point".
2. Set [MODE] to [4Q].
3. Turn the [Y LEVEL] knob fully counter-clockwise.
4. Turn the [X LEVEL] knob fully clockwise.
5. Set [X IN] to 'AC'
6. Connect a 200Hz 10VAC triangle wave to [X IN].
7. Adjust P203 for minimum output.

Adjust the gain

1. Leave the [BIAS] control at the "threshold point".
2. Set [MODE] to [2Q].
3. Set [X IN] to 'AC'
4. Set [Y IN] to 'DC'
5. Turn the [X LEVEL] knob fully clockwise.
6. Turn the [Y LEVEL] knob full clockwise.
7. Connect a 200Hz 10VAC triangle wave to [X IN]
8. Connect 5VDC to [Y IN]
9. Adjust P204 for an output of 10VAC.

