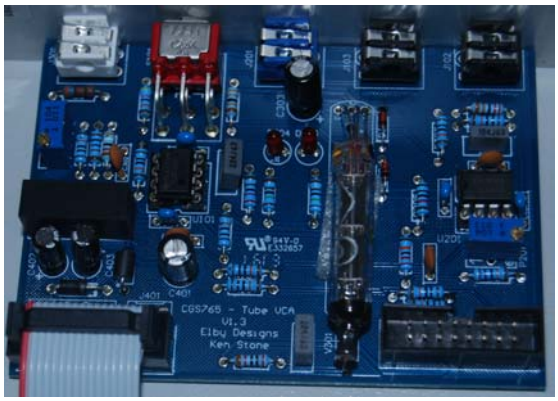
Panther Series – CGS765 Tube VCA

Construction of the CGS765 is straightforward. There is one main board plus one Panther Support board. Constructors are recommended to read our General Construction Notes.

Constructors should refer to the Component Overlay and the Bill of Materials for the current value of all components.

1. Start assembly with the main board fitting all components except the valve and switch.
2. Take the valve and carefully fan the leads out a few mm. Ensuring that the orientation of the tube leads is correct, insert the leads in to the pcb and gently feed them through until the tube is about 3cm above the board.
3. Using a pair of narrow-nose pliers, start folding the tube over until it is parallel with the board using the pliers to carefuly form the leads as you go.The tube should finish up about 1cm above the board.
4. Place the piece of supplied foam on to the marked are on the pcb and press the tube down against the pcb/foam with a little firm pressure and solder the leads in to place.
5. Place the switch on to the pcb and offer up to the front panel securing it using a couple of jack nuts.
6. Fit and tighten a nut to the switch ensuring that the switch toggle action is vertical. When happy, solder in to place.
7. Assemble the Panther Support board and attach to the module.
8. Fit the Panther IDC cable to connect the 2 boards.
9. Finish assembly by adding remaining jack nuts and knobs.



Calibration

Set the panel CV controls to their zero position, and feed a signal into the input. Make sure you have the input level/drive pot turned at least part way up. Adjust trimmer P201 until a signal is heard at the output, then back off until it just stops.

The overall gain of the module can be adjusted by P301 if required.

Power Supply and Connection

To optimise the operation of the tube the CGS765 uses a dual-rail step-up regulator to generate +/-15VDC. This module, therefore, only runs from the +12VDC system power rail. Consumption is of the order of 20mA with around 13mA being used by the tube heater circuit.

The Panther Series of modules have been designed to be compatible with the popular Doepfer range of EuroRack modules and consequently uses a matching connector.

The red stripe on the power cable represents pin 1 (–12V rail) on the IDC connector. All Panther Series boards used a boxed 16-way IDC header with a polarising key. Pin 1 on the power connector is towards the bottom edge of the board.

Please pay particular attention to the orientation of the power cable when connecting to a busboard that uses open headers or if using a cable from a 3rd-party to prevent possible damage to the system.

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