# FREQUENCY CENTRAL

Build documentation for:



Output module with 6.35mm left and right line outs, and 2 x stereo headphone outs (1 Watt)

Little PCB

(top)



Big PCB



(bottom)

## Features:

- Left and Right Eurorack level inputs (2 x 3.5mm sockets)
- Left and Right line level outputs (2 x 6.35mm sockets)
- 2 x stereo headphone outputs (2 x 6.35mm sockets)
- Stereo volume control for headphone outputs
- Right input is normalled from Left input when there is no jack in the Right input

Bill of Materials			
1/4 watt metal film:	<u>100nF x 4</u>	TDA2822	A100K dual
10R x 2	<u>10uF x 1</u>		potentiometer
470R x 2	<u>100uF x 4</u>	<u>8 pin socket x 1</u>	
100K x 2			3.5mm socket x 2
			<u>6.35mm socket x 4</u>
1/8 watt 0805 SMD			
1K x 2			Male 40 pin header
2K2 x 2			Female 40 pin header
			<u>10 pin box header x 1</u>
			Small knob x 1

Please observe the correct polarity of the electrolytic capacitors.

#### Little PCB assembly

- 1. Solder all resistors
- 2. Solder both 100nF capacitors
- 3. Place the pot and 2 x 3.5mm sockets onto the PCB, making sure the ground tabs of the sockets line up with the PCB's ground pads, then place the panel over them. This will assure that the sockets are correctly positioned. Flip the whole lot over and solder the pot and sockets into place.
- 4. Cut female header to size and solder into place. Make sure that it sticks out of the bottom of the PCB.



### Big PCB assembly (top)

- 1. Solder both resistors
- 2. Solder the IC socket and insert the TDA2822
- 3. Solder both 100nF capacitors
- 4. Solder the 10uF capacitor
- 5. Cut male header to size and solder into place
- 6. Place the 4 x 6.35mm sockets onto the PCB then place the panel over them. This will assure that the sockets are correctly positioned. Flip the whole lot over and solder the sockets into place



### **Big PCB assembly (bottom)**

- 1. Solder all four SMD resistors (these drop Eurorack level to line level): tin a pad, hold the resistor with tweezers, reflow the pad and present the resistor while solder is molten. Solder other side of resistor to it's pad. Retouch as required.
- 2. Solder the power header
- 3. Solder the 4 x 100uF electrolytic capacitors



## Final assembly

1. Present the little PCB to the panel, and secure into place using the relevant nuts.



2. Present the big PCB to the little PCB/panel, ensuring that the male header matches up with the female header. Secure into place using the relevant nuts.





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