

01-23-2022, Chuck Olson, Jackson Harbor Press

Grandson of Zerobeat HP LED array enclosure kit manual



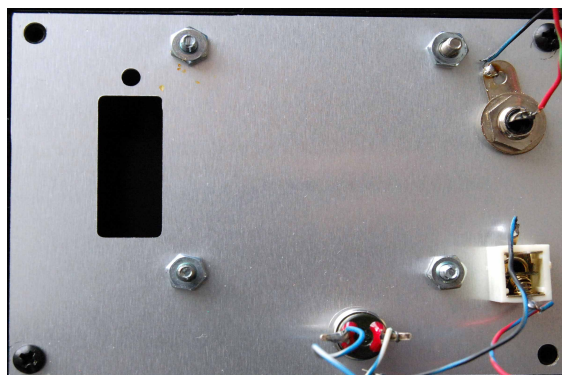
Assembly:

1) First, build the Grandson of Zerobeat HP LED array kit per the manual EXCEPT that the 3mm red LED should have its leads formed like this: (suggestion: don't solder the LED at this point).



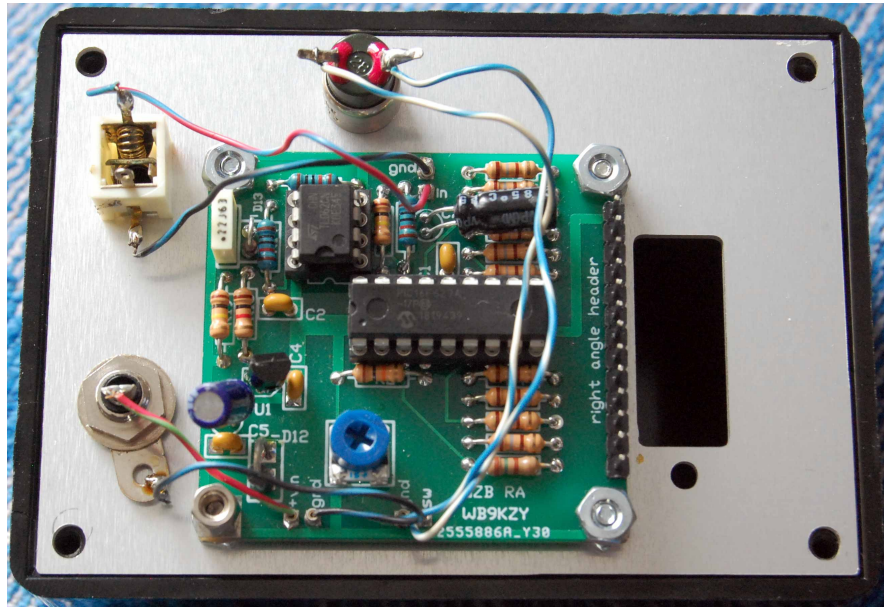
2) solder the straight header with the short pins toward the main board.

3) Mount the hardware, switch and jacks on the front panel as shown here:

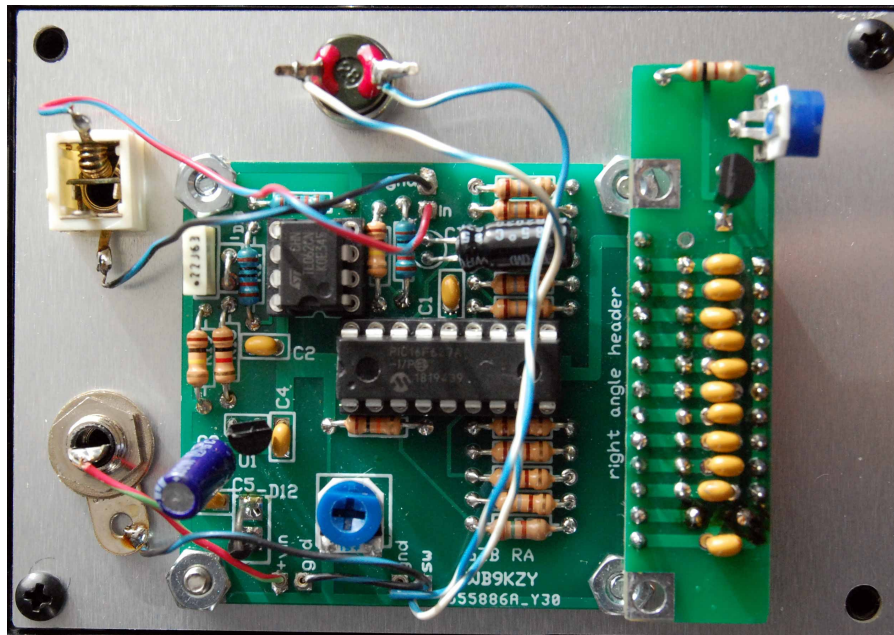


Note that the jacks and switch may vary a little from the pictured prototype.

- 4) Mount the main board to the front panel with the 4 x 4-40 nuts. The switch, audio jack and power jack can also be soldered to the main board, I used pin sockets (not included) with the pictured unit. Note that a 150 ohm resistor is shown for R9 in the next 2 pictures (right above ZB RA board silk screen) however a 180 ohm resistor is preferred for R9 with a 3 mm red LED.



4) Mount the daughter board on the straight header as shown with the front of the LED array flush with the front panel. The 3mm LED may have to be adjusted to fit. Solder the header and LED to the daughter board.



5) Finally (after testing it out per the board assembly manual) mount the front panel in the case using

the four x black 4-40 machine screws.

6) modification ideas:

a) There is space on the panel for a power switch and/or another audio jack (which could be wired in parallel with the existing audio jack to act as a Y adapter for a speaker or headphone).

b) The power jack can be changed to whatever the builder prefers, as a Ten-Tec and Heathkit owner I always used RCA jacks for power :) Also, the power connections could be made through the back of the box with a cable or jack, then the front panel hole marked power could be used for a switch.

c) A hole can be drilled in the top of the case to allow the dimmer pot to be set with a screwdriver.

d) A hole can be drilled in the back of the case to allow the level set pot to be adjusted with a screwdriver.

Grandson of Zerobeat HP LED array enclosure kit stocklist:

Quantity	description
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1	4 x 3 x 1.5" phenolic box
1	top plate, silk screened, pre-drilled
4	black 4-40 x 5/16" Philips screws
4	steel 4-40 machine screws for mounting the main board
8	4-40 nuts for mounting the circuit boards
1	3.5 mm mono input jack
1	RCA female power jack
1	C&K 8121 momentary switch with cap

items NOT included with enclosure kit:      wire, solder