**DIY INSTRUCTIONS** 

## Honey Bee Creatives DIY Air Purifier Box

By Shea O'Neil (the Maskers Comic)



Assembly time: **20 minutes** 

- \*Estimated smoke CADR: 310 cfm
- \*Estimated Occupants (40cfm per): 8
- \*Estimated 5 ACH Coverage: 465 sq ft

\*(estimates based on the similarly designed <u>Aerateing Table by Clean Air Kits</u>)

Most comparable to: the <u>Rabbit Air BIOGS</u> <u>2.0</u> HEPA purifier in size and noise, however the Rabbit only has 136 cfm Smoke CADR per unit, meaning you would need 2 Rabbits at \$365/unit, to achieve similar CADR.

# Supplies (total cost per unit is estimated \$266.76 USD)

• 1 Housing Kit

Honey Bee Creative Kit (6 fan): \$139.00 snappable housing, fan guards (note this is just the housing, must order all other supplies below separately)

- 6 Computer (PC) Fans-Arctic P14 fans (<u>5-pack arctic</u> <u>P14 (\$33.98)</u>, and <u>1 pack arctic</u> <u>P14(</u>\$13.99)
  Note: Can be any combination of 3-pin or 4-pin P14 140mm case fans (aka PC fans)
- 2 MERV 13 filters: 20x20x1 3M/Filtrete MERV 13 filters-Note: only need to order 1 of these as it comes in a <u>2 pack of</u> 20x20x1 3M/Filtrete Merv 13 Filter (\$43.65)
- 1 1-to-3-way 3-pin pc fan splitter cable -

Note: only need to order 1 of these, it comes in a <u>2 pack- 1 to 3</u> way **3Pin/4pin pc** Fan Splitter Cable (\$8.49)

 1 Power Cord: AC to DC power adapter with pc connectors <u>Delinx (\$16.99)</u>

#### Assembly

Tip: Repeated aggressive pushing and pulling wears on the clips and will reduce their lifespan. Please watch HoneyBee Creative's <u>Youtube video</u> for fan placement before you assemble if you are unsure.

- Lay out your Honey Bee Creatives Kit. Make sure you received 12 Panels with 6 fan coverings. The inside of the panels should be labeled, lay them out in piles (Lid 1, Lid 2, Lid 3) (F1, F2, F3) (Back 1, Back 2, Back 3) (Base 1, Base 2, Base 3) (6 Circular PC fan Covers)
- 2. Connect the Base panels (1-3)
- 3. Place **Circular PC fan covers** in the circle cutout of each panel.
- 4. Gently rock the **P14 Arctic Computer fans** into the tabs of each panel, but read the tips first!:
  - PC fans will need to be pointed so air flows out through the fan protector. Counterintuitively, this usually means the label is facing the inside, and so that the air is flowing out of the box (it is because they aren't being used to cool the inside of a PC, they are being used to blow toward the outside of this Air Purifier Box).
  - It is easiest if you only angle the PC fans slightly and gently pull the tabs out while pushing the PC fan down until it snaps into place.

- Do not force the PC fan all the way down on one side. Make a rocking motion and step it into place.
- 5. Connect the Back panels (1-3)
- 6. Place **power cord** through the slot in the back of the Base Panels and connect the Back Panels to the Base Panels by panels by sliding them down.
- 7. Place **Merv 13 filters** in the slots of the Base and Back Panels. They should easily fit in the bottom and back slots.
- 8. Connect **F1-3 Panels** with PC fans in the front. Make sure the panel marked "Must be on Top," is the top panel. They should easily fit the filters in the slots as well.
- 9. Once the Front panels are attached, connect the fan splitter cable to one of the splitter cables attached to the power cord. Then attach the power cables from the splitter and the power cord to the PC fans.
  - Tip: Make sure cords are kept away from fan blades. This can be done by string, zip ties, twisters, velcro, or clips.
- 10. Place **Lid 1** nearest the **Front Panel 1**. Connect **power cable**.
- 11. Place **Lid 2** and connect the power.
- 12. To place **Lid3**, connect power cable first and then connect it to the other panels. Plug in, turn to high.
- 13. **To change filters:** Turn off. Remove Lid panels OR Base panels and slide old filters out and new ones in.

### **Review by the Maskers Comic:**

I was not given any deals or incentives to make this review and have no conflicts of interest.

5 out of 5 Stars!

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I really love this unit.

I am an IKEA-level assembler, and although I did have to think a little as I followed the directions, **I got it all together on my first try.** 

I moved it around a few spaces in my home to see where I liked it best (it was a tough decision as **it fits well in many spaces**), but I ended up putting it in my Master Bedroom.

I formerly had a Rabbit Air BioGS 2.0 HEPA purifier in that room, which was very quiet and worked well, but when I put this unit in my Master bedroom, **the room now has a cleaner feel than the HEPA**. I moved my HEPA unit into a smaller office/school room and it functions better in that smaller space.

This Honey Bee Creatives DIY Air Purifier Box (which is made with two 20x20x1 MERV 13 filters (3m), and looks sort of like a third of a typical CR Box, really does a great job at moving air through it.

And the best part: on high it is **quiet enough to sleep with- those PC fans make a world of difference** in the sound level. It might not have as much power and CADR as my 4 filter CR Box in my large living room area, but it is so much quieter and cuter-looking!

Thank you <u>Honey Bee Creatives</u>!

Sincerely,

Shea O'Neil, The Maskers Comic