

Luggable XXL STEM Kit



Assembly videos: <https://www.youtube.com/@cleanairkits>

ELECTRICAL



DC Barrel to 9 Fan Sockets Harness (or two 5-way hubs)

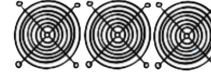


USB-C Charging Brick & 12V DC Barrel Adapter



Nine 120mm Fans

COMPONENTS



HARDWARE

Two 25x7" Fan Panels

Two 25x7" Blank Panels

9 Fan Grills

36 Fan Push Pins

Steel Tension Wire

TOOLS



Scissors



Putty knife



Zip Ties

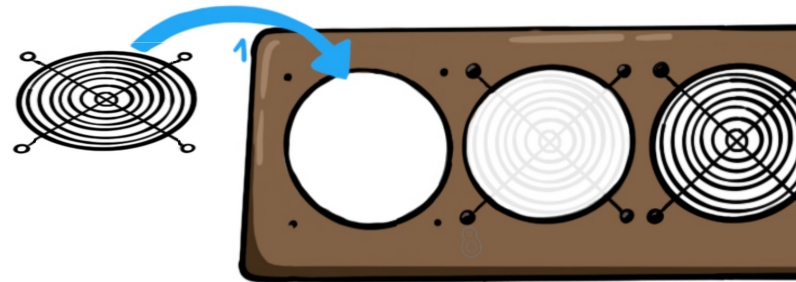


3M Filtrete MPR 1500-2500 25x25x1" (Sold Separately)

INSTRUCTIONS

1) Orient the grills in a symmetric pattern (popping outward) and insert push pins. If hard to press, place grill-side down on table and push back of panel around pin(s).

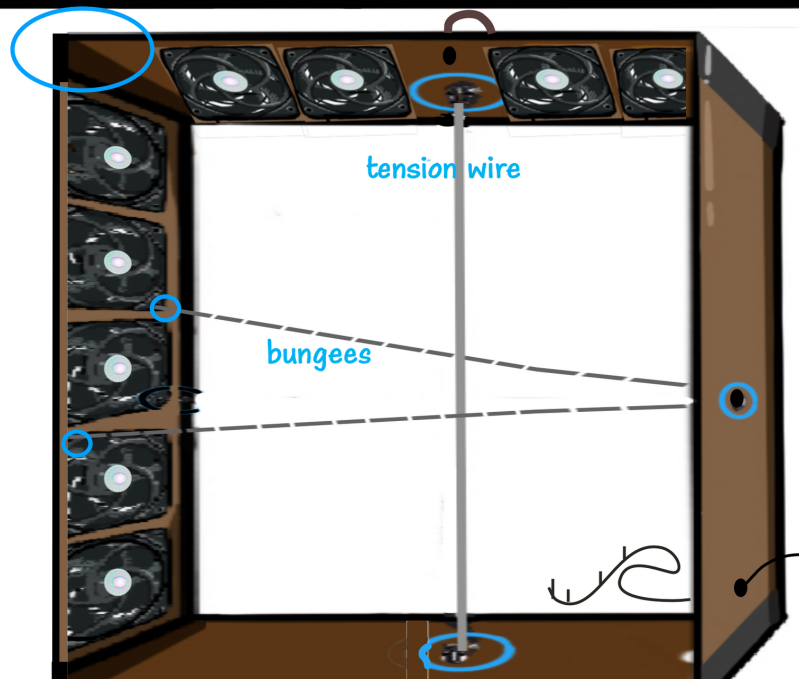
Leave grill-side down for step 2)



2) Fan specs should face grills while pretty stickers face inside of box. Wires should exit a consistent side. Firmly push fan frames onto pins. Flip over and press pins w/ a blunt end tool handle as necessary to fully seat without gaps to panel.

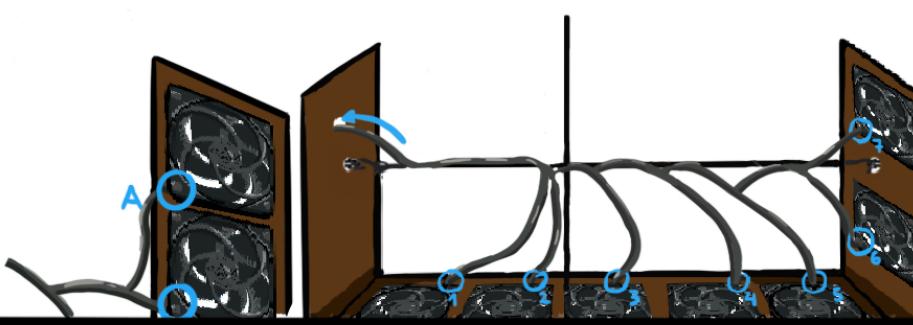


3) Slide panels firmly into slotted panel connectors. Panels w/5-fans & wire harness are side panels. Squeeze from opposite ends to seat all the way. The black gaffer tape along edges creates a strong friction grip.

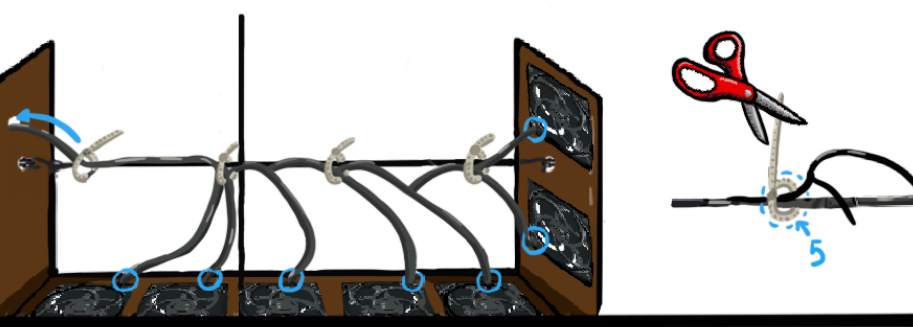


4) Hook the tension wire from clip under top handle down to clip at center of blank bottom panel. Stretch and tie bungee cords from blank side to 2th & 4th side fan screw holes, forming a taught V.

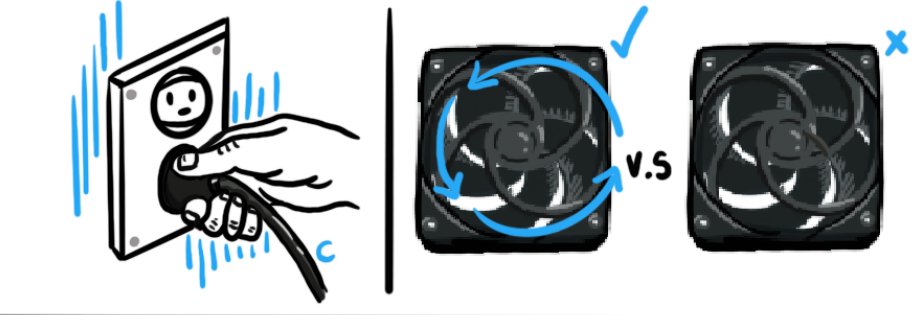
5) Fan harness comes pre-attached to a side panel thru strain-relief grommet. Starting with fan closest to grommet hole, plug pwm cables into first harness sockets. Daisy-chain 3-way or 5-way splitters if provided.



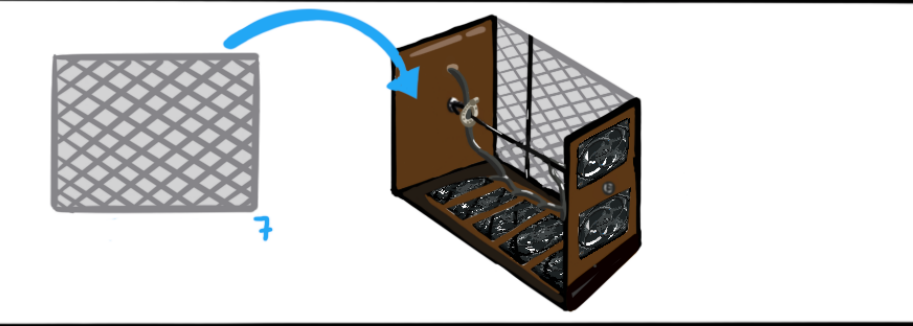
6) Secure the fan harness and cables along the central tension wire with zip ties. Pull any wire excess away from fans & tie toward tension wire.



7) Connect the DC barrel plug to the USBC adapter and plug charger brick in to wall for test. All fans should run without hitting any wires or obstructions.



8) Disconnect power. Push the filters into the open sides. Insert putty knife to pry outward any panel that catches filter edge.



9) FINAL INSPECTION. You are responsible for noticeable gaps/leaks (e.g. > 2 mm^2) around fans or filters that can reduce filtration efficiency. Inspect carefully from all sides. Tighten push pins, panel connectors & bungees. Trim excess cardboard overhang at filter corners. Plug gaps with foam or tape as necessary.

Air should suck into filters and blow out through fans. Place fan & filter sides at least 2" from walls, preferably 12" for full performance!



CleanAirKits on YouTube