Logix Vent Controller

These are the 3d models included in this package. Suggested uses ABS or a heat resist filament as PLA will melt and warp in most applications. The main model is for a 4x12 vent but by changing the 2 flaps and center base it can by printed for 4x10 and others.

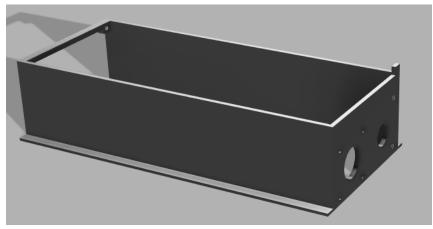
Main Body Center.STL is the main center section of the vent.

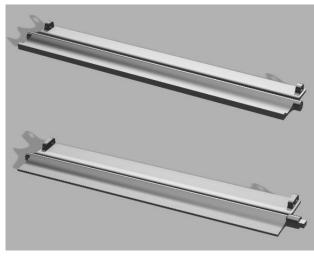


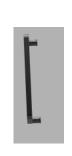
Main Body Back.STL holds the 2 back bearings and screws to the center body with 4 M4x10mm flat head screws. This is the last piece to put on once the flats are installed.

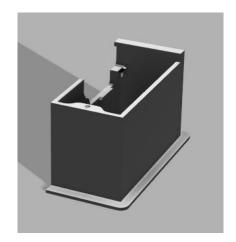
Flap.STL takes a 688ZZ bearing on each end and connects to the center section and the back.

Flap Indexed.STL takes a 688ZZ bearing on the back end while the rectangle indexed end will slot into the lock motor.





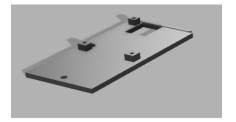




Main Body Control Box.STL holds the 12mm button and motor and screw to the center body with 4 M4x12mm flat head screws through both sections and the motor and 2 M4x10mm through both sections. It also houses the last 688ZZ bearing.

Lever.STL snaps in the connectors on the flaps so the open/close in unison.

The motor control board screws to this backing plate. It is designed for my board but you can modify to hold your own ESP8266/ESP32 based board. It is then attached to the motor and buttons and finally screwed to the control box with 1 M4x10mm flat head screw



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This is a list of additional parts you may need to assemble the 4x12 vent.

6 x M4x10mm for case https://www.amazon.com/dp/B07S18NHP5?ref=ppx_yo2ov_dt_b_fed_asin_title

4 x M4x12mm for motor through case mount

1 x M4x10mm for cover

3 X 688ZZ Ball Bearing 8mm x 16mm x 5mm Double Shielded https://www.amazon.com/gp/product/B07FW2YKL8/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
12mm button https://www.amazon.com/dp/B0811QKG1R?ref=ppx_hzod_title_dt_b_fed_asin_title_0_0
Adafruit lock motor https://www.adafruit.com/product/3881



ESPHome based motor control board



4P JST connector/wires https://www.amazon.com/gp/product/B01DUC1S7S/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1 2P JST connector/wires

Passive POE 24V wall connector <u>24V Passive POE Power Supply</u>
RJ45 cable length to suit
Metal vent grate (or make/modify your own) https://www.amazon.com/dp/B0026T0OPO?ref=ppx_yo2ov_dt_b_fed_asin_title&th=1

I will be creating a hardware kit and offering for purchase that will include my control board.