## KITCHEN VENTILATION CONTROL SYSTEM MANUAL (KVCS)

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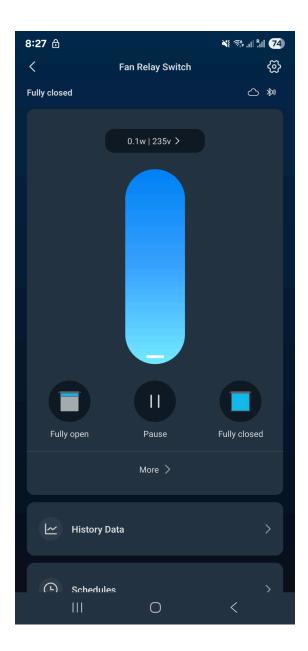
Disclaimer: The system has been successfully run and tested at home. This is not a standardized solution or product. This is a non-profit solution only for educational purposes.

I am not liable for any damages that occur before, during, and after installation. Please hire a professional(Electrician) to do the job.

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- 1) Make sure the electrician has all the things listed on the purchasing sheet.
- 2) Make sure the electrician has made the wiring shown in the electrical Diagram.
- 3) Download and create an account on the SwitchBot Mobile App. Link: <a href="https://play.google.com/store/apps/details?id=com.theswitchbot.switchbot">https://play.google.com/store/apps/details?id=com.theswitchbot.switchbot</a>
- 4) Add all the devices to the app using the 'Manuals' for each device.
  - SwitchBot Hub Mini
  - SwitchBot Relay Switch 2PM: Installation mode Cover and Shade
  - SwitchBot Contact Sensor: Installation Mode Others
- 5) Leave the whole KVCS system switched ON after connections for 2-3 hours before the Electrician fixes it permanently in place.

  Let the firmware updates arrive for all the devices, especially for Relay v1.6 or later.
- 6) As soon as the firmware update arrives for the relay, calibrate the Damper motor using the 'Calibrate Device' function in the Relay Switch 2PM settings.
  - When asked, choose 'Fully Open' (state in the software) when the damper is fully open and 'Fully Close' (state in the software) when the damper is fully closed.
  - Test the state of the damper by pressing the corresponding button on the app.

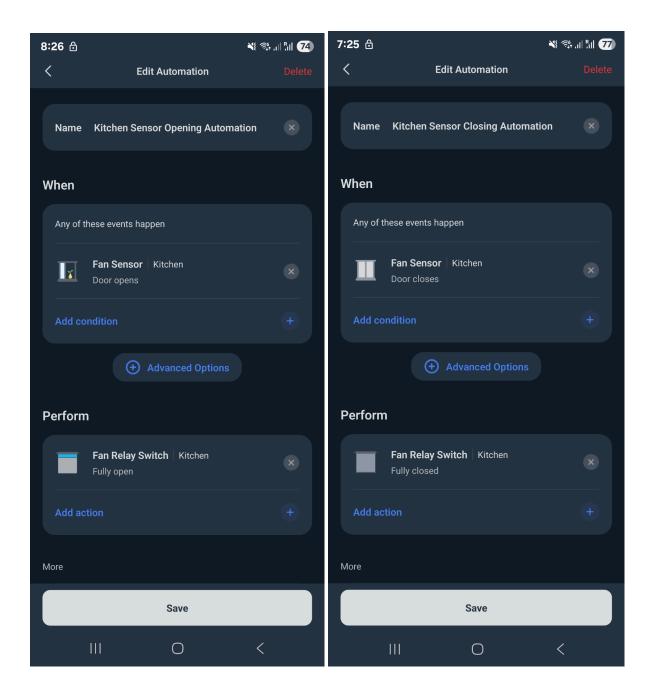


Please note that it only works well after the v1.6 update.

## 7) Now it's time to create Automation for the KVCS:

Opening the Damper

- Choose the Automation section from the bottom of the app.
- Click the add icon in the top right corner.
- Rename the process as picture below.
- Add event under When > smart devices > fan sensor > Door Opens.
- Add action under Perform > Smart devices > Fan Relay switch > Full open
- Turn off notifications and save the Automation.



## Closing the Damper

- Choose the Automation section again from the bottom of the app.
- Click the add icon in the top right corner.
- Rename the process as picture below.
- Add event under When > smart devices > fan sensor > Door closes.
- Add action under Perform > Smart devices > Fan Relay switch > Full close
- Turn off notifications and save the Automation.

8) Install the Contact sensor on the kitchen exhaust lid as shown in the picture.



Test one last time before fixing it in place using the contact sensor. It usually takes a minute to run the whole cycle.

9) Install the KVCS between the exhaust pipe and the extractor hood.



Remember to test the whole functionality before installing the cover.