

User Manual

Ochsner Stove Sensor 1.0

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Revision History

Date	Version	Details of change	Author	Reviewers
23-08-2021	0.1	Initial draft	Ochsner	Ochsner
24-08-2021	1.0	Released Version	Ochsner	Ochsner

Table 1 : Revision History

1 USING THIS MANUAL

1.1 Purpose and Audience

This document provides Introduction, key features, design platform Architecture and interfaces, setup and use of Ochsner Stove Sensor 1.0. It is intended for the users who are configuring this product. The user need to use this product in order to monitor the 'ON-OFF' state of stove through one's gadgets(Mobile). It basically alerts the owner if the stove is turned ON/OFF or left ON by any of the family members of the user.

This document only provide details regarding the Stove Sensor Standalone Device.

1.2 References

Sr No	Reference Document Title	Provided by	Remarks
1	Ochsner Stove Sensor 1.0 Schematic	Volansys	NA

Table 2: References

2 PRODUCT OVERVIEW

Stove Sensor is a battery operated standalone device used to monitor the 'ON-OFF' state of the stove. It automatically detect the state of stove and sends the status to the Gateway(Master Device) using **Z-Wave** radio connectivity. The product supports two 3V **CR123A** Li-MgO₂ batteries with capacity of 1550mAh each which leads to more than **1 year battery life**.

Notes: Gateway(Master Device) details are not included in this document.



Figure 1: Stove Sensor Device

2.1 System Block Diagram

Stove Sensor Device monitor the state of stove and sends the status to Gateway(Master Device) if there is any change of event('ON-OFF' state of Stove).

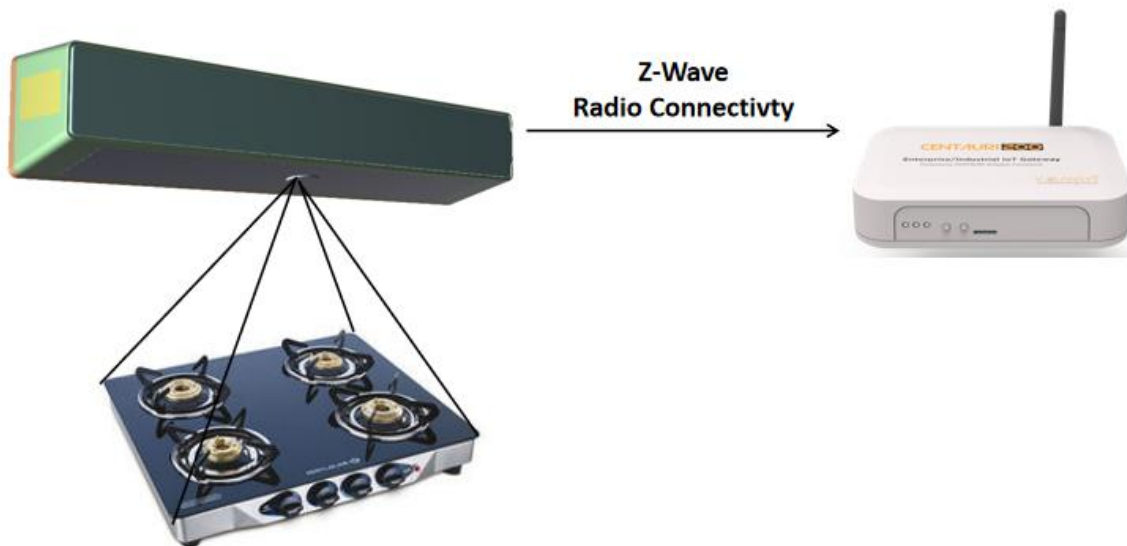


Figure 2: Stove Sensor System Block Diagram

Notes: CENTAURI Gateway is used for an example. Different Gateways can also be used.

2.2 Product Features and Functionality

The table below lists major features and function of the Ochsner Stove Sensor 1.0.

Sr No	Feature Parameter	Specification
1	Stove Sensor Device Box Content	1. Stove Sensor Device 2. 2xBatteries
2	Batteries	CR123A Panasonic Industrial(3V, 1550mAH)
3	Radio Connectivity	Z-Wave(916MHz, 908.4MHz, 908.42MHz)
4	Antenna	FPC Antenna
5	User LED	Green LED
6	User Button	For Initiating the inclusion process
7	Certification	FCC, IC
8	Operating Temperature	0°C to 85°C
9	Enclosure Dimension	182 x 33 x 28 mm(L x W x H)
10	Weight (in g)	100g

2.3 Stove Sensor Device Information Label

The Stove Sensor Device information Label on the device contains the following information about the specific unit:

- Company Logo
- Model Name
- FCC ID
- IC ID
- Designed by

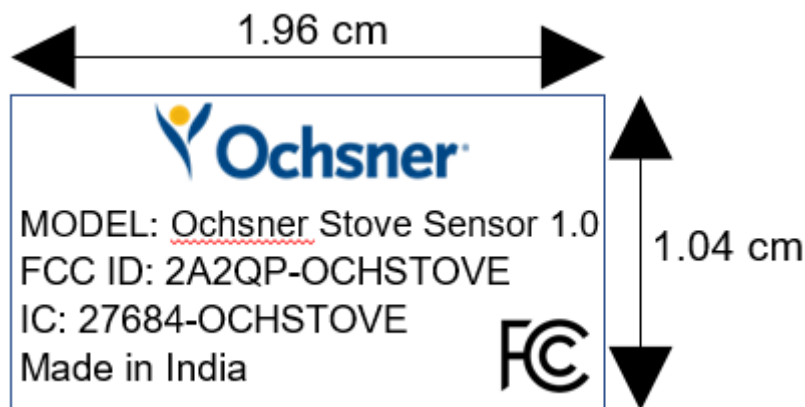


Figure 3: Ochsner Stove Sensor 1.0 Label

2.4 Stove Sensor Device Configuration Steps.

Stove Sensor needs to be included (paired) with the Gateway before the installation of the device. Below are the steps to be followed for the pairing process:

- Insert the two CR123A batteries inside the device by opening the front panel of the device.

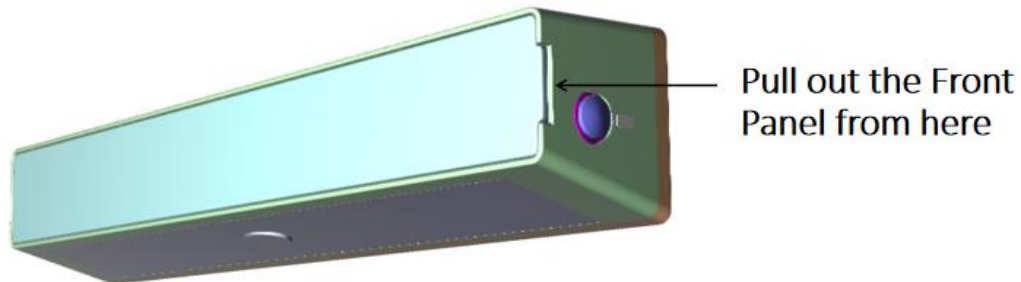


Figure 4: Front Panel Opening

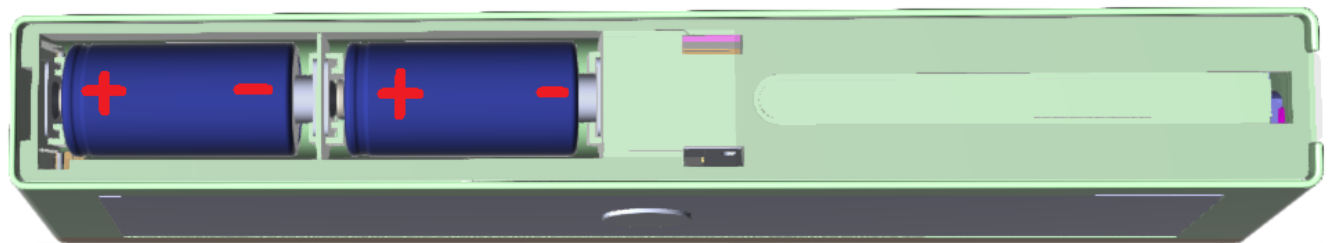


Figure 5: Battery Insertion

- After the insertion of batteries close the front panel.
- Now initiate the inclusion process(Pairing Process) from Gateway(Master Device).
- Then single press the User button, it will initiate the inclusion process(Pairing Process) from Stove Sensor device.

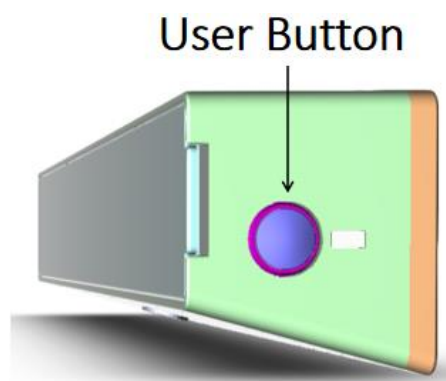


Figure 6: User Button

- User LED(Green) will start blinking after the single press of user button which indicate the stove sensor device is under inclusion process(Pairing Process).

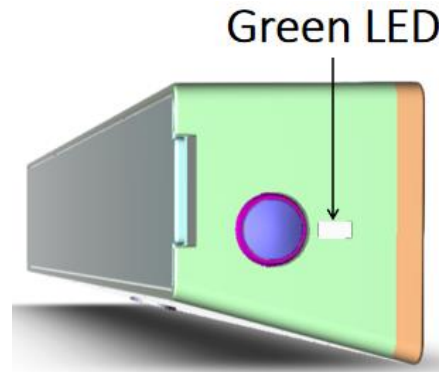


Figure 7: Green LED

2.5 Stove Sensor Device Installation Steps.

Stove Sensor Device needs to be installed over the back wall of stove for better monitoring of stove. Below are the steps for installation.

- Apply the 3M tape on the back cover of the Stove Sensor enclosure.

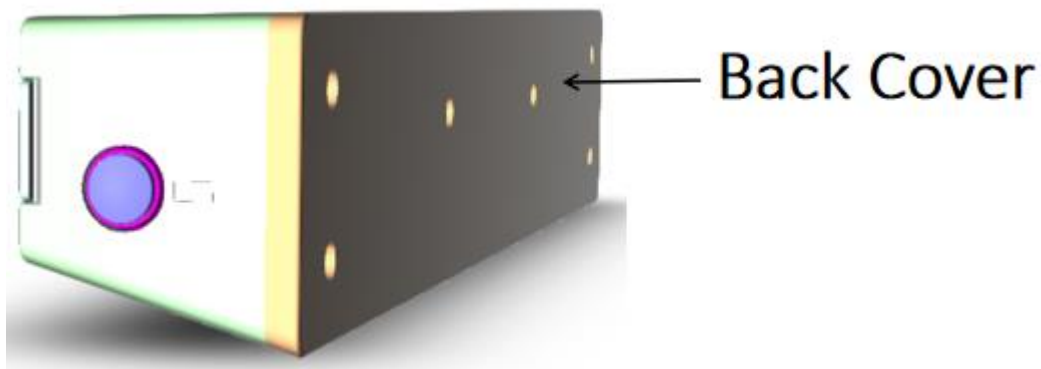


Figure 8: Stove Sensor Device Backcover

- Now remove the cover from the other side of 3M tape and stick it to the back wall of the stove at possible height less 40inch.

3 CONTACT US AND SUPPORT

USA Office: Ochsner Clinic Foundation

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New Orleans, Louisiana 70121, United States

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Ochsner Clinic Foundation offers many resources to support our customers and Stove Sensor Device platform at **Website:** <https://www.ochsner.org/>

For instance, you can ask a question and other technical details related to reference design platforms at our website. At this site you can also find FAQs, bulletins, warranty information, extended support services and Reference design platform documentation.

To contact technical support or sales, look up your local office at: <https://www.ochsner.org/about-ochsner/contact-us> -> [Locations](#)

When you report a problem, please fill the form in above link.

4 APPENDIX-A

4.1 FCC and IC Compliance

Design Name Model: Ochsner Stove Sensor 1.0

Conforms to the following standards or other normative documents:

FCC: FCC part 15 modular certification ID: **2A2QP-OCHSTOVE**

IC: Industry Canada RSS-247 modular certification IC: **27684-OCHSTOVE**

Warning: Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules and Canada Industry licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference; and
- (2) this device must accept any interference. Including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'industrie Canada applicables aux appareils radio exempts de licence L'exploitation est autorisée aux deux conditions suivantes:

- 1) l'appareil ne doit pas produire de brouillage; et
- 2) l'utilisateur de l'appareil doit accepter le brouillage radioélectrique subi même si le brouillage est

susceptible d'encompromettre le fonctionnement. mauvais fonctionnement.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

FCC/IC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable & Fixed/mobile (min20cm) exposure condition without restriction.