

Please Keep This Manual for Future Reference

## **Guardian 2010 Cooktop Model - August 2011**

Thank you for your purchase. *STOVE GUARD* is an electronic safety device for use with electric stoves. It turns the stove OFF when you forget by using the advanced technology found in security monitoring devices and a specially programmed microcontroller.

*STOVE GUARD* controls the stove's electrical system to help prevent food and pots from burning, as well as reducing the risk of fire caused by unattended cooking.

***STOVE GUARD* is preset at the factory at the highest fire safety setting of one minute.  
Most Home Care Workers will set the Auto Timer to 5-7 minutes maximum.**

**This is the recommended setting for use by anyone with Alzheimer's or similar medical conditions.**

- When properly installed, adjusted, and set in **AUTO** mode, *STOVE GUARD* will automatically shut the electric cooktop stove OFF if no one is present in the monitored cooking area for a preset period of time.
- Upon returning to the cooking area, *STOVE GUARD* will detect their presence and automatically turn the stove ON again. The preset time will reset to the last setting.
- *STOVE GUARD* can also be used in a **TIMER** mode to set a maximum cooking time; after the preset time is reached, the stove will be turned OFF. The **TIMER** setting may be used to cook food for a preset time. In Timer mode the Motion Sensor will not monitor the cooking area.

### **IMPORTANT WARNING**

Installation of the *STOVE GUARD* COOKTOP Model **requires a licensed Electrician** to be wired properly according to local electrical codes.

Do not disassemble any of the components. There are no user serviceable parts inside. Refer servicing to a qualified person only.

### **IMPORTANT TECHNICAL SAFEGUARDS**

**DO NOT INSTALL** the EMU (Electronic Monitoring Unit):

- Directly above a heat source or where hot/cold air or steam will blow onto it;
- On or above a microwave or toaster oven;
- Directly on or above the stove;

Do not allow grease to build up on the sensing unit. This will reduce *STOVE GUARD*'s sensing range, and possibly turn the stove OFF even when someone is present in the kitchen.

Clean the outer surface of the EMU with a clean, damp cloth only. Do not use soaps or cleaning liquids.

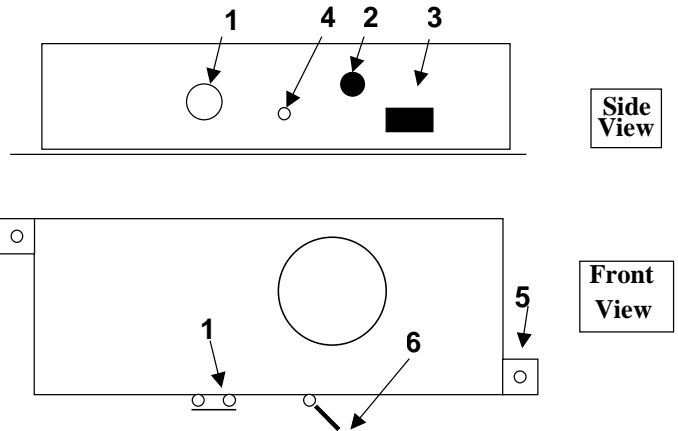
*STOVE GUARD* must be tested with the individual who requires this device and adjusted to their personal needs, as well as adjusted to the home environment of use to ensure proper functioning. Additional fire safety devices, such as smoke detectors and fire extinguishers must also be used to ensure complete cooking fire safety.

## WHAT'S INCLUDED (UNPACKING CHECKLIST)

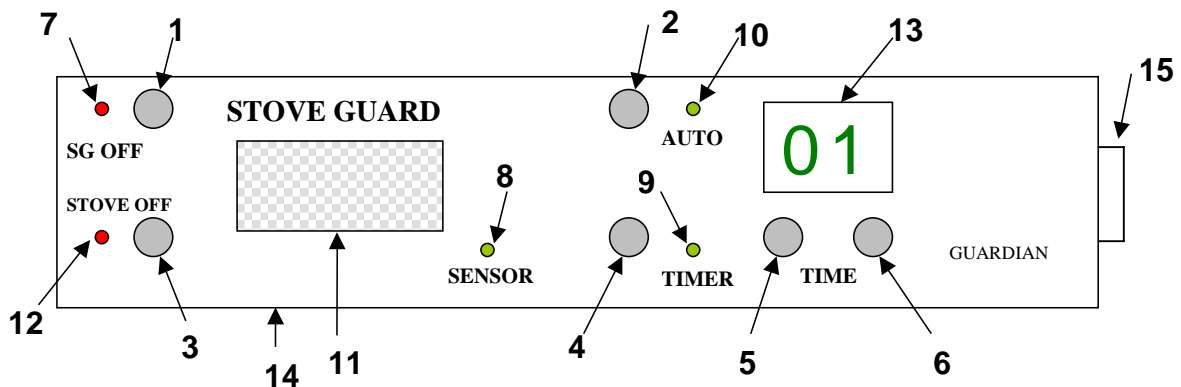
- ❑ Power Box
- ❑ EMU (Electronic Monitoring Unit)
- ❑ Wall mounting screws (2 short) and under cabinet screws (2 long)
- ❑ Instruction Manual

### POWER BOX

1. Main Power 220-240V wire opening/clamp
2. 240VAC 0.7A Fuse
3. Rocker Switch to Control 120V Power (Must be set during installation)
4. EMU cord opening
5. Mounting Brackets
6. Control cord to EMU



### EMU - ELECTRONIC MONITORING UNIT



- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. SG OFF button</li> <li>2. AUTO MODE button to activate Motion Detector</li> <li>3. STOVE OFF button</li> <li>4. TIMER MODE button</li> <li>5. TIME ADJUST button in 10 minute intervals</li> <li>6. TIME ADJUST button in 1 minute intervals</li> <li>7. SG OFF Indicator LED</li> <li>8. MOVEMENT indicator LED</li> </ol> | <ol style="list-style-type: none"> <li>9. TIMER MODE indicator LED</li> <li>10. AUTO MODE indicator LED</li> <li>11. Window for Movement detector</li> <li>12. STOVE OFF indicator LED</li> <li>13. TIME display</li> <li>14. Sensor height level adjustment screw - to raise or lower the sensor's field of view (Normally does not need to be adjusted).</li> <li>15. Buzzer</li> </ol> |
|---|---|

## INSTALLING THE STOVE GUARD

**A licensed electrician, according to local electrical codes, must install the Stove Guard cooktop model.**

Failure to use a professional will result in possible loss of life, warranty and property insurance.

1. Shut off power to the cooktop at the service panel.
2. Access the cooktop wiring.
3. Remove the *STOVE GUARD* Power Box cover & refer to the wiring diagram.
4. Disconnect the existing cooktop power wires & feed into the *STOVE GUARD* Power Box.
5. Make connections according to the enclosed wiring diagram on the last page.
6. Replace the *STOVE GUARD* Power Box cover.
7. Connect the thin white cable from the Power Box (#6 on the Power Box Diagram) to the receptacle in the back of the EMU, by lining up the pins on the connector, do not use force. Route the cable in the recessed groove.
8. Turn power to the cooktop back ON.
9. For the safety reasons, after a power failure, if power goes off and return back, or after the first use, the stove will remain turned off until user presses any button. The red Stove Off and red SG Off LED should lighting. Display should show **PO**. Turn a burner on a low setting. The burner should remain cold (turned off). Turn off the burner.
10. Setting the Rocker Switch on Power Box to the proper position: If the burner was hot in previous step, switch the rocker switch on the *STOVE GUARD* Power Box to the other operating position (#3 on the Power Box Diagram).
11. Make sure nothing is on the top of stove. Press the AUTO button. This should turn the stove on. Green Auto LED should light. Green Sensor LED will light when movement is detected. A time of **01** minute should appear on the display. A time of 1 minute is the factory default preset. Wait about 20 seconds till display shows **--**. Dashes mean that there is not current detection (the stove doesn't draw current). Turn on a burner. Stove Guard should detect current, display will show **01**. Test the Stove Guard by standing out of the EMU's sensor detection area. After 1 minute, power to the stove burner should shut off. When re-entering the sensor detection area, sensor detects movement, and the Stove Guard will turn the stove burner on again. You could hear a relay click or see that display changes from **00** (time with no movement detected reach 0). Turn off the burner. Do not touch the burner... It may be hot...
12. Mount the EMU to an upper kitchen cabinet, or to the wall.
13. Test *STOVE GUARD* in its various modes and instruct the final user on Stove Guard's proper use.

## MOUNTING the EMU (Electronic Monitoring Unit)

The best location for mounting the EMU is under an upper kitchen cabinet approximately 12" (30cm) from the right or left side of the stove, or on the wall approximately 18" (45cm) from the right or left side of the stove.

**Remember: DO NOT place it directly on or above the stove.**

### MOUNTING TO THE BOTTOM OF A KITCHEN CABINET

- Remove the plastic covers from the 2 holes on the top and bottom of the EMU.
- Feed the two long screws from the bottom to the top of the EMU and screw directly into the bottom of the cabinet.
- Ensure that the cable is properly routed back to the Power Box.

## MOUNTING TO THE WALL

- Mark 2 points on the wall exactly 7 1/16 " (18cm) apart.
- Drill 2 holes and install two short screws, leaving the screw threads exposed approx. 1/4" (6mm).
- Line up & Place the EMU on the screw heads and slide it down.
- Ensure that the cable is properly routed back to the Power Box.

## USING STOVE GUARD

The new Guardian is a product that unites password features with standard Stove Guard model. User could change model of Stove Guard to fit specific needs. There are three user selectable models:

- The **Basic** model developed to satisfy most Home user's needs. This model allows cognitive users to easily change settings, while thwarting a "button pusher" user attempts to disable the device. ("Press & Hold" button when changing settings.)
- The **No-Delay** model has "Press and Hold" feature disabled.
- The **Password** model version features password locking, for managed-care type situations. Administrators can set the device to the User's particular needs, and then password lock it.

Most users don't need to change Stove Guard's model. Description how to change model, additional custom settings and details about password locking is available in a separate Advanced setting manual.

## OPERATING MODES

The Stove Guard has 4 operating modes to control the stove: AUTO, TIMER, SG-OFF, and STOVE-OFF.

### AUTO MODE

***This is the most versatile mode - provides the automatic protection and no further setting is required.***

The AUTO mode allows the *motion detector* in the EMU to automatically shut the stove off if the user is out of the sensing area for longer than the preset time (*1 minute is the factory-preset time*). When the user re-enters the sensing area, *approximately 10-12 feet (3-4m) line of site from the EMU*, the Stove Guard will turn the stove back on and reset timer to the last preset time. There is no need to reset the timer each time.

The green AUTO indicator lights; Green movement indicator lights every time when movement is detected and resets clock to the preset time. Display will show number of minutes left before Stove Guard turns off the stove if no movement is detected. If no movement is detected (user turn on the stove and left kitchen) for the preset time, Stove Guard will turn off the stove, display will show **00** and red Stove Off indicator (#12 on EMU diagram) lights. The display will show **--** when stove is turned off (no current is detected for more then 4 minutes and 40 seconds).

### TIMER

The green TIMER indicator lights. In TIMER mode stove will operate for preset time (default is 5 minutes) which can be adjusted to the cooking time of specific dish. Once the preset time is over, the stove will turn off. Display shows number of minutes left before Stove Guard turns off the stove. When decimal point between digits lights display shows hours and tenth of hours left (if countdown time is above 99 minutes). Movement detection is disabled in timer mode.

### SG-OFF

The red SG OFF indicator lights. When the Stove Guard is in the SG-OFF (Stove Guard Off) mode the stove retains its regular function, and the Stove Guard's safety features are inactive. The display is blank. SG-OFF mode can be used for cooking for long time on low heat when no presence in the kitchen is necessary. For the safety reason one hour after Stove Guard is in the SG-OFF mode and the stove is turned off (current is not detected) Stove Guard automatically goes back to AUTO mode.

### STOVE-OFF

The red STOVE-OFF indicator lights. When the Stove Guard is in STOVE-OFF mode the stove is turned off (same as unplug the power cord). The display is blank.

## HOW TO ADJUST THE STOVE GUARD

### [1] SG-OFF button

When holding for 3 seconds turns the Stove Guard off (SG-OFF mode) - Stove Guard's safety features are inactive.

### [2] AUTO button

When pressed turns the Stove Guard in AUTO mode and resets preset time.

### [3] STOVE OFF button

When holding for 3 seconds turns the stove off (STOVE-OFF mode).

### [4] TIMER button

When holding for 3 seconds turns the Stove Guard in TIMER mode.

### [5] and [6] TIME buttons

TIME buttons are used for adjusting the preset time for AUTO and TIMER mode. User had to hold time buttons to start changing the preset time. User can choose between **01** and **15** minutes in AUTO and **01** minutes and **7.0** hours in TIMER mode. Left button adds 10 minutes or 1 hour and the right button adds 1 minutes or 0.1 hour (6 minutes) to the preset time. After reaching the maximum setting the preset time goes back to **01** minute.

For the safety reasons, after a power failure, if power goes off and returns back on, the Stove Guard will "wake-up" in AUTO mode with stove shut off. Display shows **PO**. The infrared movement sensor will not reset clock to preset time until user presses any button. If mode before power failure was Stove Off, the Stove Guard will remain in this mode.

When Stove Guard is in SG-OFF mode, one hour after the Stove Guard does not detect current (stove is turned off), Stove Guard will automatically go to AUTO mode. This option can be disabled. If Stove Guard is in the STOVE-OFF mode, the Stove Guard will not go to AUTO mode automatically.

The output connector and buzzer in the Stove Guard monitor unit make a change from open contact to closed (start buzzing) and goes back to open contact (stop buzzing) every time when Stove Guard turns the stove off if this option is selected.

Every Guardian model has a Password feature. The password locking feature is for managed-care type situations. Administrators can set the device to the User's particular needs, and then password lock it. If buttons are locked only the unlock function is enabled. Details about password locking is available in a separate Advanced setting manual.

## THE RELAY OUTPUT AND THE BUZZER

Two wires for the relay output are located on the back of the electronic monitor unit (EMU) near the white cable connector. The relay output can be used to trigger an external monitoring device whenever the Stove Guard disables the stove, such as a Phone Dialer or Alarm system. The buzzer in the Stove Guard monitor unit makes an audible signal at the same time as the relay output makes the change from open contact to closed (start buzzing) and goes back to open contact (stop buzzing).

## SENSING LEVEL ADJUSTMENT (Height Adjustment)

The sensing range of the EMU (*Electronic Monitoring Unit*) is over 4 meters (around 12 feet) at a radius of 110 degrees. Each time the motion sensor is activated, the green INDICATOR LED flashes (#8 on EMU Diagram).

- *STOVE GUARD* features an adjustable sensing height level to prevent the activation of the stove by small children or pets that might be detected by the motion sensor (PIR).
- There is a screw located underneath the EMU, which allows you to adjust the viewing height range of the PIR. Normally this does not need to be adjusted.

**Note: This adjustment should only be done in the following situations:**

1. It is determined that the PIR is detecting movements other than those of the intended *STOVE GUARD* user (*such as small children, pets, etc.*) which will pass within the lower portion of it's detection field.
  - To **RAISE the detection field** when the EMU cannot be located higher, slowly turn the screw to the **LEFT**.
2. *STOVE GUARD* is not detecting the movements of the user because its location is set very high up; the user is very short, or seated in a wheelchair.
  - To **LOWER the detection field** for these situations, slowly turn the screw to the **RIGHT**.

## TROUBLESHOOTING

### Why is there a very slight "...humming sound..." coming from the Stove Guard's power box?

This humming sound is normal; the sound is emitted from the energized coils in the power relays. These relay coils must be energized to allow the operation of the safety feature called "...Fail Safe...". This important added safety feature makes the Stove Guard tamper proof. This means that if any wires are purposely disconnected to try to disarm Stove Guard the kitchen stove will not operate.

**If this slight humming sound is annoying to you, try to lay the Power Box on the floor behind the stove instead of mounting it to the wall... When attached firmly to the wall or metal surface the sound may be amplified.**

### The EMU's LED's do not light up:

- Check the stove fuse or circuit breaker to ensure power is reaching the stove.
- Check that all the connections to the *STOVE GUARD* Power Box and EMU are properly connected and press the AUTO button.
- Check the fuse in the *STOVE GUARD* Power Box (#2 on *POWER BOX diagram*).

### The green INDICATOR LED flashes without any reason:

Avoid placing the EMU within the proximity of the following sources of interference that might accidentally trigger the PIR (*Motion Detector*):

- Reflective Surfaces: direct air-flow from vents, fans and windows.
- Sources of steam or cooking oil vapor.
- Infrared light sources: TV or other IR Remote Controls
- Objects causing temperature changes: such as heaters, refrigerators, toasters and ovens.
- Do not place objects that a pet can climb onto (*e.g. a cat on furniture*) within 10 feet of the EMU, or furniture higher than 3 ft.
- In addition, do not aim the EMU at a stairway a pet may have access to.

**When there was a loss of power (*Electrical Outage*)** the *STOVE GUARD* keeps the stove turned off until user press any button. The Stove Guard keeps user settings. There is no need to be adjusted to your own personal needs again.

## LIMITED WARRANTY POLICY EFFECTIVE OCT 2006

Stove Guard International Ltd. (SGIL) warrants its products to be free from defects and workmanship for a period of (2) two years from original date of purchase. SGIL agrees to repair or replace, at its sole discretion, the defective product if returned to SGIL within the warranty period and with proof of purchase.

All *STOVE GUARD* devices are tested and inspected three times by a qualified electrical inspector and by our own factory before they are packed and shipped. *STOVE GUARD* has been inspected by QAI (Certification Testing Inspection).

**IF SERVICE IS REQUIRED UNDER THIS WARRANTY**

1. Call us at 1-888-607-8683 (1-888-60-STOVE) or email us at: ***techsupport@stoveguardintl.com*** to obtain a return merchandise authorization number (RMA).
2. Return the defective unit postage paid to the address shown below.
3. Enclose proof of purchase.
4. SGIL is not responsible for shipping charges or shipping damage to units returned under warranty. Item should be packed carefully in its original carton.

This warranty does not extend to any SGIL products, which have been subject to misuse, accidents, incorrect wiring, modifications in any way or to use in violation of operating instructions furnished by SGIL, nor extends to any units altered or repaired for warranty defect by anyone other than SGIL.

This warranty does not cover any incidental or consequential damages and is in lieu of all other warranties expressed or implied and no representative or person is authorized to assume for us, any other liability in connection with the sale of our products.

**FOR TECHNICAL SUPPORT PLEASE CONTACT**

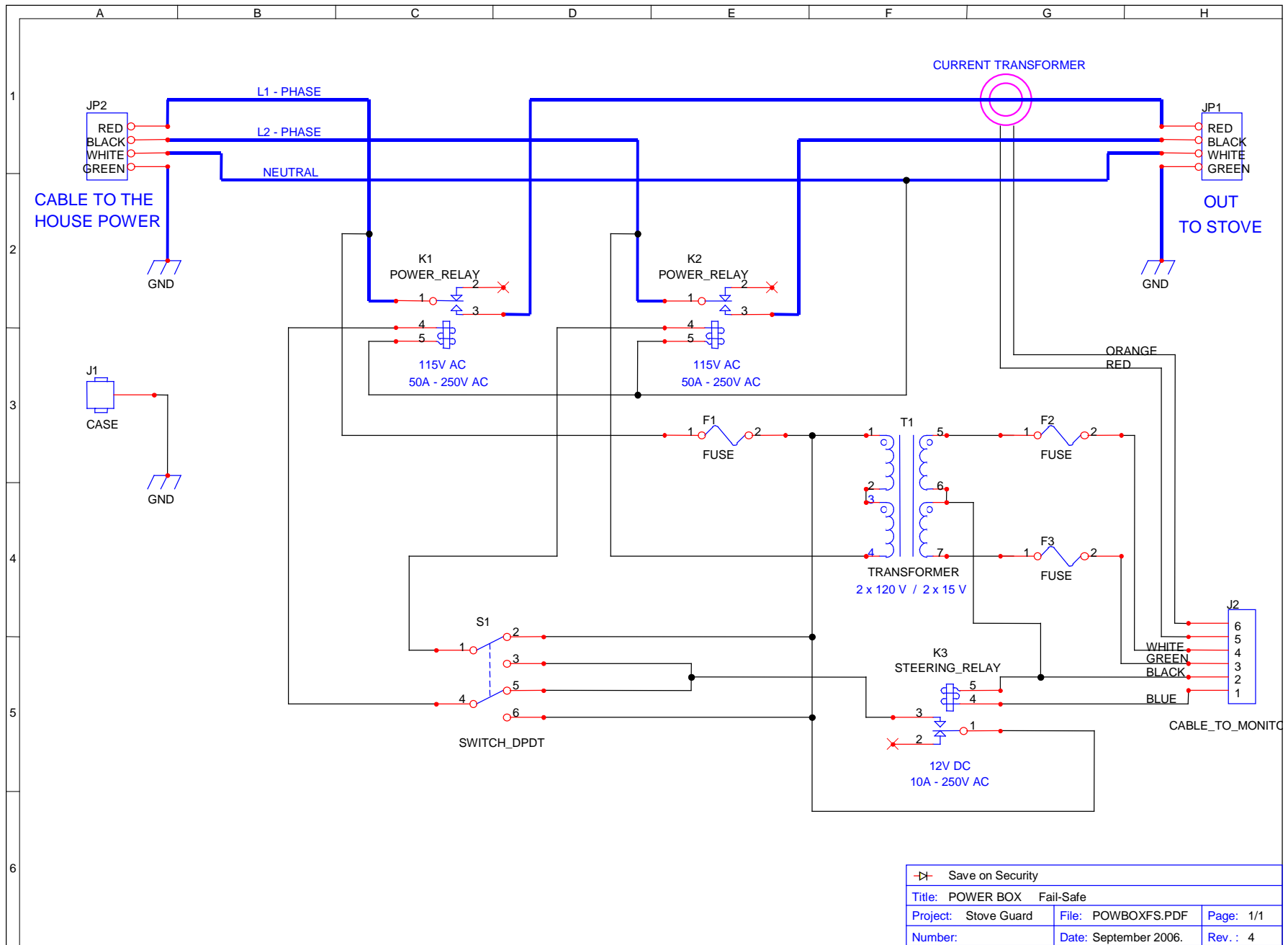
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**Conforms to UL 464 and Certified to CSA C22.1 No. 205**





**NOTE:** User has to add wires drawn in blue.