

# RangeMinder™

## *Intelligent Cooking System*

A Pioneering Technology Product



[www.pioneeringtech.com](http://www.pioneeringtech.com)

[www.preventcookingfires.com](http://www.preventcookingfires.com)

## Care and Use Manual

Limited Warranty

### **IMPORTANT!**

**READ ALL INSTRUCTIONS BEFORE INSTALLATION  
KEEP THIS MANUAL FOR FUTURE REFERENCE**

**NEVER LEAVE COOKING UNATTENDED**



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## IMPORTANT SAFETY PRECAUTIONS

*Safety Tips from the National Fire Protection Association (NFPA)*

- ◆ Never leave food cooking on the stovetop unattended.
- ◆ Keep cooking area clean and clear of combustibles (e.g. potholders, towels, rags, drapes and food packaging).
- ◆ Keep children and pets away from cooking areas by creating a three-foot (one-meter) 'kid-free zone' around the stove/range.
- ◆ Wear short, close fitting or tightly rolled sleeves when cooking. Loose clothing can dangle onto the stove/range burners and catch fire.
- ◆ Turn pot handles inward so they can't be bumped and children can't grab them.
- ◆ Never use a wet oven mitt, as it presents a scald danger if the moisture in the mitt is heated.

## FACTS AND FIGURES<sup>1</sup>

- ◆ In 2011, cooking was involved in an estimated 156,300 home structure fires that were reported to U.S. fire departments. These fires caused:
  - 470 deaths,
  - 5,390 injuries, and
  - \$1.0 billion in direct property damage.
- ◆ Cooking caused almost half (44%) of reported home fires, one of every five (19%) home fire deaths, two of every five (39%) home fire injuries, and 15% of the direct property damage from home fires in 2011.
- ◆ Unattended cooking was by far the leading cause of cooking fires.

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<sup>1</sup> From the National Fire Protection Association (NFPA)

## INTRODUCTION

Congratulations on your purchase of the RangeMinder™. The patented and patent pending RangeMinder™ *Intelligent Cooking System* is the latest tool in the fight against unattended stovetop cooking fires. This product is an easy to install upgrade for stoves/ranges, engineered to help prevent cooking fires before they start while also helping to reduce the amount of energy used to cook. Best of all it is fully automatic.

The system includes touch sensing intelligent dials which know when you have turned the burner on or off. They allow you to cook normally while the RangeMinder™ does the rest. You will have the comfort of knowing that the RangeMinder™ will draw your attention back to the stove/range if you get distracted while cooking or forget the stove/range is on.

## FEATURES

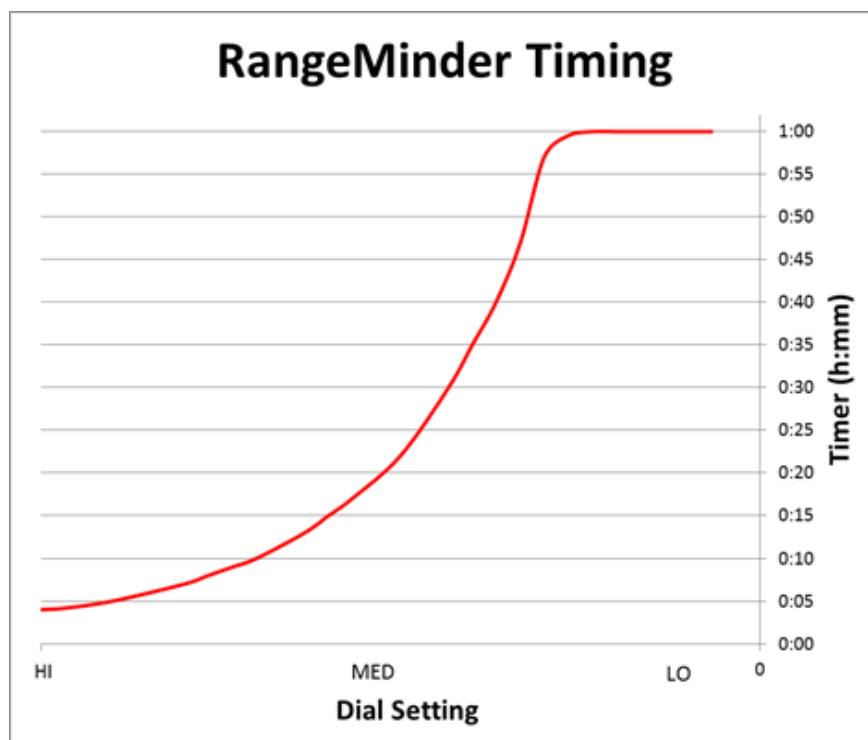
- ◆ Easy to install. The dials are designed to directly replace existing dials on most North American stoves/ranges.
- ◆ Easy to setup. With a few simple steps the RangeMinder™ can be set up to work on either gas or electric stoves/ranges.
- ◆ The intelligent dials with touch sensing technology know when you have turned the burner on and to which setting, allowing it to adapt to your cooking.
- ◆ To avoid unnecessarily loud noises the reminder alert starts at a low volume and increases until you return to the stove/range.
- ◆ The touch intelligent dials communicate wirelessly with the base so the base unit can be placed centrally in your home (within 15-25 ft. of the stove/range) to ensure you hear it wherever you are.
- ◆ Additional base units can be added to the system and placed around the home (within 15-25 ft. of the stove/range) for those with a hearing impairment or times when you have been distracted and moved away from the kitchen.
- ◆ Special low-pitch buzzer operates at a frequency (850-1000 Hz) suited for those with impaired hearing.
- ◆ Additional dials can be added for stoves/ranges with more than 4 burners (IMPORTANT: Some features not compatible with multi-coil elements).

## HOW THE RANGEMINDER™ WORKS

There are many factors affecting how quickly food heats such as weight, type of pan, contact surface, etc. In general, the higher you set the dial, the faster the cooking ingredients will heat and the faster they will reach the point of ignition which means that cooking on HI requires more attention. This is the basis for the design of the RangeMinder™. The RangeMinder™ sensor technology detects how much the dial has been turned and it uses this to set the timer. This enables the dial to grab your attention quickly when cooking on HI and avoid unnecessary interruptions when on LO.

In addition, the RangeMinder uses a patent-pending technology to track all the burners you are using and set the timer based on which burner will need attention first. This minimizes unnecessary interruptions while keeping you safe.

What is a safe time? There are a lot of factors affecting time to ignition including the type of stove/range, quality of cooking utensils and more. Below is a timing guide we recommend which is based on more than a decade of experience designing, building and testing products to help prevent cooking fires. While no system can guarantee that a fire will not start, our experience has been that this system can significantly reduce the chances of injury or property damage.



## COOKING WITH THE RANGEMINDER™

The patented and patent pending RangeMinder™ was engineered to help prevent the number one cause of household fire – stovetop cooking – and more specifically to help prevent unattended cooking, the leading cause of these fires. NEVER LEAVE COOKING UNATTENDED.

1. Always hold the dials from the grip. Do not hold from the edges.



2. Turn your range top on just as you normally would.
3. The dial is designed to know at what temperature setting you are cooking at and to set the timer appropriately. For example, if you are cooking on HI the base unit will alert you after approximately 5 minutes. If you are cooking on LO the base unit will alert you after approximately 60 minutes. During installation RangeMinder™ dial is calibrated to identify all temperature settings and set the timer for the appropriate level between 5 and 60 minutes.
4. If the base unit begins beeping check your cooking to determine if the element needs to be turned down. If it does, simply turn the dial to the new lower setting and the dial timer will reset based on the new setting. If your cooking temperature does not need to be adjusted simply touch any one of the 4 dials and the timer will be automatically reset and the timing will begin again.
5. A short beep from the base unit will let you know that timer has been set.

## **EFFICIENT COOKING**

The RangeMinder can help you save energy as well by helping to avoid these scenarios:

- Forgetting a pot of water on HI long after it has started boiling.
- Forgetting to turn the burner OFF after cooking is complete.

## **What this product will not do?**

- It will not prevent all cooking fires.
- It will not shut off the stove.
- It is not a replacement for safe cooking behavior.

## **CARE AND USE**

### **Cleaning**

Use a damp cloth to clean the RangeMinder™ dials. For stubborn stains use a household spray cleaner by applying the cleaner to a clean cloth and wiping the dial. When cleaning under the dial it is recommended that the dials be removed one at a time and reinstalled before moving on to the next one.

If the dial is removed from the stove/range, be sure to return it to the same location. Since each dial is calibrated for that location placing it in a different location may affect the accuracy and result in improper operation. If unsure which location the dial was in simply remove the battery and repeat the calibration procedure in the new location.

### **IMPORTANT!**

Although RangeMinder dials resist steam/vapor and occasional splashes of water they are not waterproof. Never immerse dials in water or soak with liquids as any liquid entering the dial may cause it to fail.

### **Replacing the Battery**

When the battery reaches a critically low level the base unit will emit a single low-pitched beep. The dial will then cease to transmit and will flash slowly. The battery should be replaced immediately. Battery life will be approximately 1 year for typical use. To replace the battery on a dial follow the instructions in the Installation Manual.

If you are replacing one of the dials or the base unit you will need to set-up the dial/base unit as if you are setting it up for the first time. Please follow the instructions in the Installation Manual.



## TROUBLESHOOTING

### **1. The light on the base unit is on but I never get an alert when I am cooking.**

- a) Base is not responding
  - A power outage or fluctuation has caused the base unit to lock up. Unplug the base. Wait 10 seconds and plug it in again.
  - The stove may be too far from the base unit. Move the base to an outlet closer to the stove/range.
- b) Dial is not transmitting
  - The battery in the dial may be dead. Replace battery.
- c) The learn procedure has not been performed or the memory in the dial has been erased.
  - Perform installation again.

### **2. Every time I perform a calibration the base unit beeps 5 times.**

The RangeMinder does not recognize the stove type.

- Location of HI and LO are not where expected. Repeat calibration being careful to stop at the exact locations of HI and LO.
- Stove/range type not in memory. The stove/range is not one of the common types held in memory or it has a *dual-ring* type burner.

NOTE: Dial will default to 5 minutes in this case.

### **3. The base unit does not beep after I insert a new battery and place it on the stove/range.**

Dial is not responding to your touch or the magnets on the stove/range.

- After a new battery is installed in the dial the touch sensor will perform a self-calibration. If you are touching the touch-sensitive area during this process the calibration will fail and the dial will be unable to detect your touch. When installing a battery do not touch the grip portion for a couple seconds to allow the calibration to complete.
- Ensure sensor ring is installed on the stove and the arrow is pointing toward the OFF position (usually up).

## **4. When I insert a new battery in the dial I hear a low pitched tone from the Base Unit.**

Battery voltage low

- A single low pitched beep signifies a low battery. This is accompanied by slow flashing of the light on the dial. Replace battery with a new one.

## **5. After a blackout or after plugging in the Base Unit the alert begins to sound immediately.**

One of the burners was ON prior to the power being lost. To help provide maximum protection, the base unit will remember if a burner was on prior to losing power. If a burner was on then it will alert you immediately once power is restored to remind you that something was cooking and the burner may still be on.

- The alarm can be stopped by touching each of the dials one at a time. This will renew the link to the base unit.
- If the alarm continues to sound then the base unit may need to be reset. To reset touch and hold the learn button on the base unit until you hear 3 beeps. This will erase all settings in memory and disable the RangeMinder. In this case you must put the base unit back into learning mode and touch each dial to renew the link to the base. Ensure the base beeps once for each dial. If this step is not performed the RangeMinder will remain disabled.

## **6. After cleaning my stove/range the RangeMinder began to beep or did not operate properly.**

During the calibration process each dial is setup to work with the particular sensor ring below it. Moving a dial to a different burner may cause the dial to not operate properly.

- Move the dial back to the position used during the calibration *OR*
- Remove the battery and perform the calibration procedure again for the new position.

## SPECIFICATIONS

### Dial

**Power:** 3V, battery operated

**Battery Type:** CR2450 coin cell

**Expected Battery Life:** 1 year for typical use

**Transmitter Frequency:** 434MHz

**Range:** up to 15-25ft (5-7.5m), dependant on environment such as electrical interference, obstacles, walls, etc.

### Base Unit

**Power:** 120VAC, 100mA, 60Hz

**Buzzer frequency:** 850-1000Hz

**Maximum buzzer volume:** 80dB typ. at 10 centimeters

## FCC Class B Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

**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/television technician for help.

## Industry Canada Compliance Statement

This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

## Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

## LIMITED WARRANTY

Pioneering Technology Corp. warrants that the product is free from defects in materials and workmanship when operated and maintained according to the instructions provided for a period of:

One (1) year from date of purchase for residential use

The limited warranty does not cover damage resulting from commercial use, misuse, accident, modification or alteration to hardware or software, tampering, unsuitable physical or operating environment beyond product specifications, or improper maintenance. There is no warranty of uninterrupted or error-free operation.

For service under this warranty contact your RangeMinder™ distributor or Pioneering Technology Corp. at:

Pioneering Technology Corp. - Service Dept.  
220 Britannia Rd. East  
Mississauga, Ontario  
Canada L4Z 1S6  
Tel: (800) 433-6026 or (905) 712-2061 ext. 228  
Email: [service@pioneeringtech.com](mailto:service@pioneeringtech.com)

[www.pioneeringtech.com](http://www.pioneeringtech.com)

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