

# RC300

## IntelliFire Plus™ Multifunction Remote Control

### Installation & Operating Instructions

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged system component.
- Modification of the system component.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

**Any such action may cause a fire hazard.**

- Read, understand and follow these instructions for safe installation and operation.

### Introduction

The RC300 multifunctional remote control is designed to control pilot light, flame height, blower speed, and up to two 120 VAC auxiliary functions on your gas fireplace. The RC300 is equipped with thermostat functions which can automatically control the temperature in the room in which it is installed. The control is only for use with the Hearth & Home Technologies IntelliFire Plus™ system (IPI). The AUX300 module is rated for 120 VAC, 60 Hz, and is required for operation of this remote control device.

### Installation Precautions

This remote control is tested and safe when installed in accordance with this installation manual. Do not install any components that may be damaged.

Do not modify, disassemble, or substitute any of the components included with this kit. Installation of this unit must be done by a qualified service technician.

Placement of this remote control may affect performance. An assessment of the space should be done prior to installation for optimum performance.

### Determine Location

Determine the location for the remote control. The selected location should be in the same space as the gas fireplace. Never place this unit in a separate room. The remote control must be placed within 30 feet (9.14 m) of the fireplace but should not be exposed to extreme heat.

The RC300 is approved for interior installation and should not be used in exterior applications.

- Keep remote control out of reach of children.

### FCC Requirements

**WARNING! Risk of Fire!** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**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.
- Contact the dealer or an experienced radio TV technician for help.

### Canadian Equipment Requirements

This digital apparatus does not exceed the (Class A/ Class B) limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques (de la class A/de la class B) prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

This device complies with RSS-210 of Industry and Science Canada. 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.

## Changing Temperature Scale

To change the temperature display between Celsius and Fahrenheit, remove the battery cover from the back of the remote control and slide the switch to your desired temperature scale (see Figure 1). The screen will automatically change the indicators on the room temperature and set temperature portion.

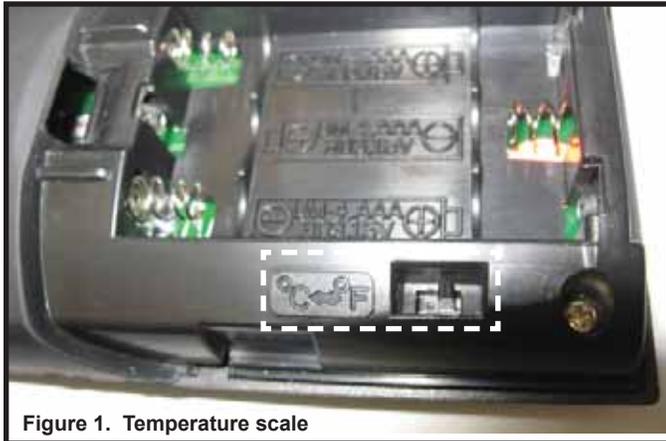


Figure 1. Temperature scale

## Installation of Remote Control Housing

**CAUTION! Risk of Fire! DO NOT install damaged or modified components. Warranty will be voided if damaged or modified components are installed.**

**Kit components:** One remote control, two #6 screws, two wall anchors, 3 AAA batteries and one AUX300 module. If batteries are properly installed the remote will turn on

1. Remove remote control components from packaging.
2. Remove battery cover from the back of the remote by sliding it down and install 3 AAA batteries.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacation, trips, etc):

- Remove batteries from remote control.
  - Unplug switching adapter and remove back-up batteries.
3. Secure the remote control housing on a flat wall surface using the two screws and wall anchors provided. See Figure 2.

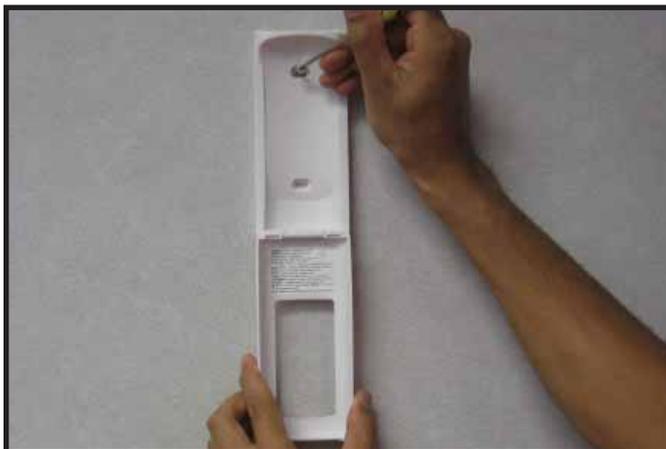


Figure 2. Mounting Remote Control Housing

4. Place remote control inside housing. See Figure 3.



Figure 3. Remote in Housing

5. Close the housing door. See Figure 4.



Figure 4. Mounting Remote Control Housing

## AUX300 Module Installation

- Insert the 4 hole harness from the AUX300 module into the 4 pin plug on the control module. See Figure 5.



Figure 5. AUX 300 module installation

## Fan Installation

- Insert the 3 prong plug from the fan into the receptacle located in the AUX300 module. See Figure 6.
- Insert 3 prong plug from AUX300 module into REM/AUX receptacle of fireplace junction box.



Figure 6. Plug Fan into AUX300 Module



Figure 7. Programming RC300

## Programming the RC300 to the Control Module

**CAUTION! Risk of burns! DO NOT program the remote control to the control module when fireplace is hot.**

- Verify the ON/OFF/REMOTE switch is in the REMOTE position. Green LED light will blink three times and wall switch will beep once 5 seconds later when ready. See Figure 7.
- Using a small item (such as a paper clip) press and release the LEARN button located near the ON/OFF/REMOTE switch. See Figure 7.
- Control module will beep once and LED will blink green for 10 seconds.
- While the LED is blinking, press the POWER button on the remote control. A double beep will come out of the control module to indicate that it has been programmed successfully.

**NOTICE:** Up to three remote controls can be programmed into the control module. Simply press a button on the other remote controls during the 10 second programming process to add another remote into the system. It is recommended to program only one RC300 remote control.

To clear memory in the control module, use a small item (such as a paper clip) to press and release the LEARN button. Control module will beep once and LED will blink green for 10 seconds **DO NOT** press any buttons on the remote during the ten seconds that the green LED blinks. The memory will be cleared. Note that the RC300 will not be programmed if it's in STANDBY mode. Press the ON/OFF button twice to switch to IDLE mode.

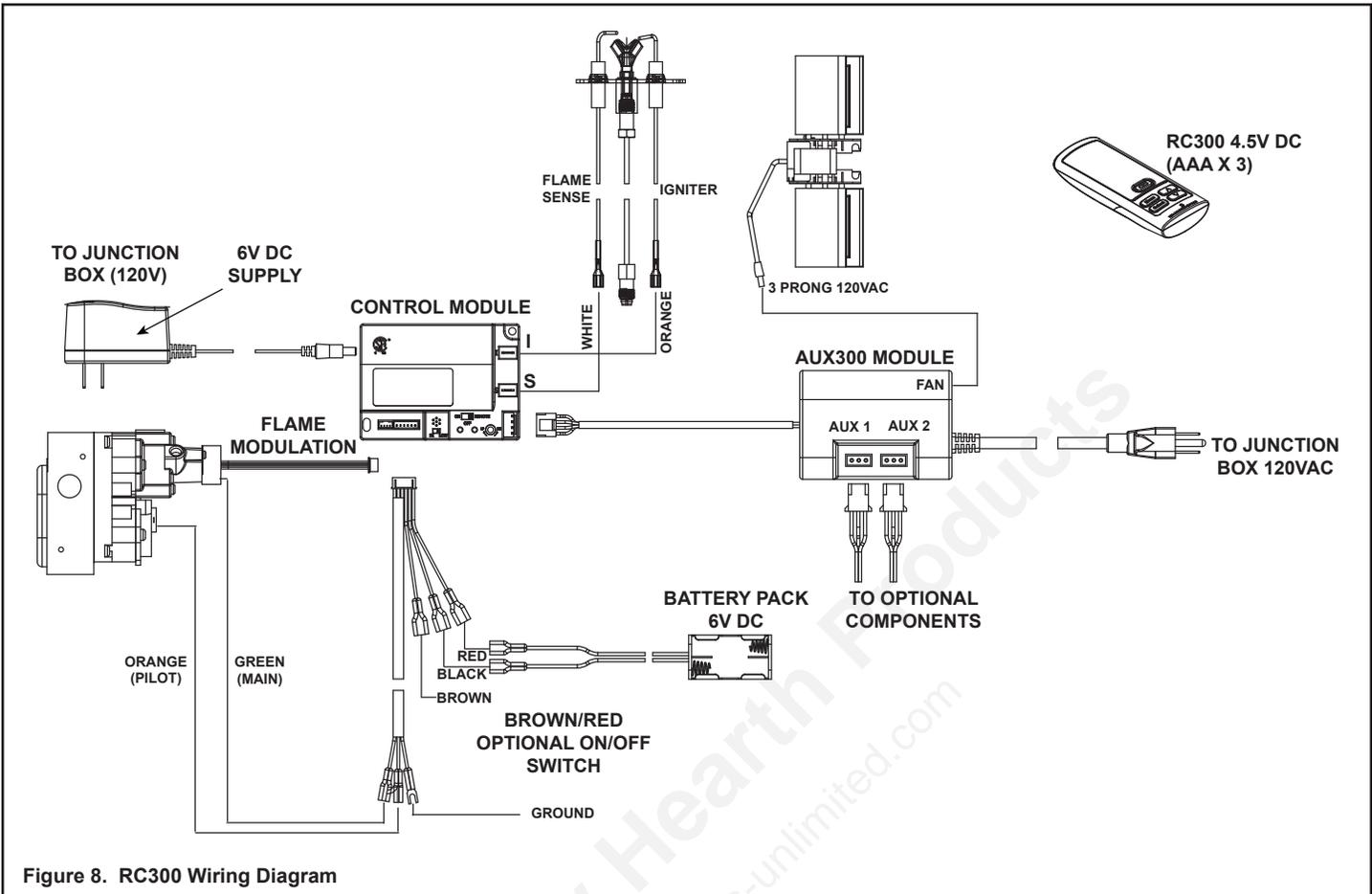
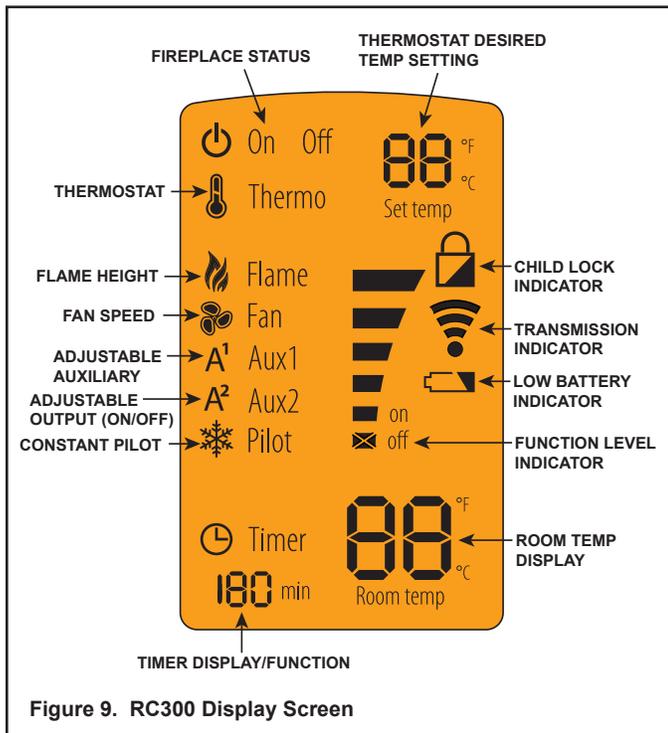


Figure 8. RC300 Wiring Diagram

## Display Screen

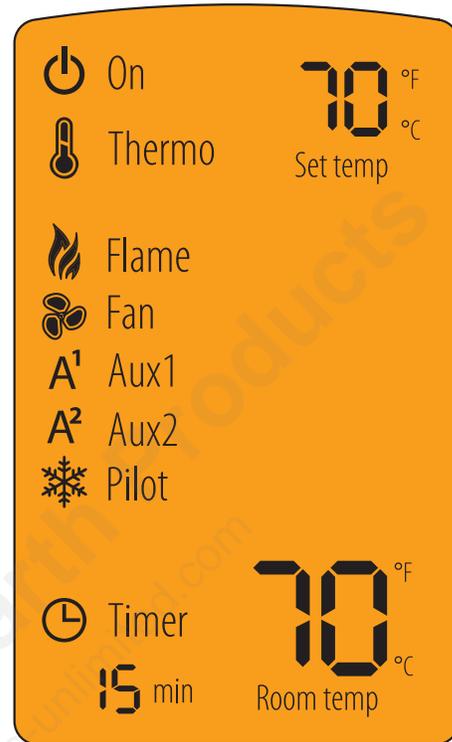


## Function Buttons

- POWER** Use POWER button to turn the unit on and off.
- Menu** Use MENU button to display the menu functions. Only functions that can be activated will be displayed. *For example: Flame Height will not be displayed when the remote status is OFF.*
- Select** Use the SELECT button to select the current feature.
- UP** Use the UP and DOWN arrows to toggle through the menu functions and value selections in the submenus.
- DOWN**

## Idle When Remote is in ON Mode

The remote control will go into an idle mode if no buttons are pressed within 5 seconds. Press any button to resume full functionality. In idle mode only active functions will show on the screen.



## Standby mode

The remote control will go into a standby mode if no buttons are pressed within 5 minutes. Press the POWER button to reactivate the remote control to ON mode. Active functions will be displayed



## About ON Mode

- All functions can be accessed when the remote control is in the ON mode.
- Only active functions will be displayed when the remote control is in the ON mode. For example: if the fan is the only function that's active, the fan icon and flame will be the only icon shown in the display.

## About OFF Mode

Only the following functions can be accessed in the OFF mode:

- AUX1
- AUX2
- Constant Pilot

Only active functions will be displayed when the remote control is in the OFF mode.

## Turning On the Fireplace

- Press the **POWER** button to turn the fireplace ON. The fireplace will first ignite the pilot. Once the pilot flame is established the main burner will be lit.

**NOTICE:** Whenever the fireplace is cycled from OFF to ON, the main burner will light on high for 10 seconds before returning to the previous user setting.

## Adjusting Flame Height

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **FLAME** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **FLAME HEIGHT**, then press **SELECT**. The **FLAME HEIGHT** can be adjusted to 5 different settings.

**NOTICE:** FLAME HEIGHT will not be adjustable for first ten seconds when fireplace is turned on.

**NOTICE:** The system will remember the previous FLAME HEIGHT setting and will automatically adjust after 10 seconds.

## Adjusting Fan Speed

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **FAN** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **FAN SPEED**, then press **SELECT**. The **FAN SPEED** can be adjusted to 3 different settings: HIGH, MEDIUM, LOW.

**NOTICE:** The fan is controlled by a timer built into the control module. After the fireplace is turned ON the timer will wait for 3 minutes before turning on the fan. In addition, the fan will remain on for 12 minutes after the fireplace has been turned OFF.

**NOTICE:** The FAN will start up on the high setting for 10 seconds before adjusting to the previous user setting.

## AUX1 Function (Unit dependent Function)

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **AUX1** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **AUX1** output, then press **SELECT**. The **AUX1** function can be adjusted to 4 different settings: HI, MED, LOW and OFF.

## AUX2 Function (Unit dependent Function)

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **AUX2** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **AUX2 ON** or **OFF**, then press **SELECT**. The **AUX2** function can be either be turned **ON** or **OFF**.

**NOTICE:** The system will remember the previous AUX1 and AUX2 setting from the menu. However, when the fireplace is turned OFF both AUX1 and AUX2 will be turned off. AUX and AUX2 can be activated when the flame is off from the remote's OFF mode. When the fireplace is turned back ON the AUX1 and AUX2 settings will be restored to the previous ON setting.

## Adjusting Thermostat

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **THERMO** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **THERMO ON** or **OFF**, then press **SELECT** (the **SET TEMP** will start blinking). Using the **UP** and **DOWN** arrows select the desired temperature and press **SELECT**.

**NOTICE:** If the **THERMO** function is on, the **SET TEMP** can be adjusted at any time by pressing the **UP** and **DOWN** arrows.

**NOTICE:** As the **ROOM TEMP (RT)** approaches **SET TEMP (ST)**, the remote system will automatically adjust the flame height. If the **RT** rises above **ST**, the fireplace will shut down the main burner. After this, the fireplace will turn back on after the **RT** drops below the **ST**.

**NOTICE:** The system requires a two degree Fahrenheit or higher temperature difference between **RT** and **ST** for the fireplace to turn on.

**NOTICE:** The system will remember the previous **TEMPERATURE** setting when **THERMOSTAT** mode is cycled **ON** or **OFF**.

**NOTICE:** If your installation includes an optional wired **ON/OFF** wall switch, it should be in the **OFF** position when using the **RC300** in thermostat mode.

## Adjusting Timer

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **TIMER** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **TIMER ON** or **OFF**, then press **SELECT**. Using the **UP** and **DOWN** arrows select the desired set time and press **SELECT**. Timer operates in increments of 15, 30, 45, 60, 90, 120 and 180 minutes.

## Activating/Deactivating Constant Pilot

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **PILOT** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **CONSTANT PILOT ON** or **OFF**, then press **SELECT**.

**NOTICE:** A beep will come from the control module indicating **CONSTANT PILOT** has been activated. A double beep will come from the control module indicating **CONSTANT PILOT** has been deactivated.

## Setting the Child Lock

- Press and hold the **MENU** and **UP** arrow buttons simultaneously for 4 seconds to enable or disable the child lock feature.

**NOTICE:** No functions will be usable until child lock feature is disabled.

## Power Outage

- If fireplace battery backup system **IS** installed at time of power outage, fireplace operation will not be interrupted.
- If fireplace battery backup system **IS NOT** installed at time of power outage, fireplace will shut off. To resume fireplace operation, install battery backup.

**NOTICE:** Battery polarity must be correct or module damage will occur.

## Manual Fireplace Shutoff

In the unlikely event that the remote wall switch malfunctions and will not turn off the fireplace, call your dealer for service assistance. In the meantime, you may choose one of the following actions to turn off the fireplace:

**CAUTION!** Risk of burns! Fireplace surfaces are hot when operating and during cool down. Use care and wear gloves when opening the front and accessing components inside the fireplace.

Check remote screen for battery level indicator, replace the batteries if low battery is indicated (See Figure 9).

The fireplace may be manually shut down by one of the following methods:

### Turn off the control module:

- Open or remove the decorative front to access the control module.
- Move switch to **OFF** (See Figure 7).

### Disconnect power to the control module:

- Open or remove the decorative front to access power cord to the junction box and/or back-up batteries.
- Unplug the control module and/or remove back-up batteries.

### Shut off gas to the control:

- Open or remove the decorative front and locate the gas shut-off valve to the left of the gas control.
- Rotate the valve 90 degrees to turn off gas supply.

### Turn off power to the fireplace (if back-up batteries are not installed):

- Locate house circuit breaker for fireplace.
- Turn off the circuit breaker.

## Frequently Asked Questions/Troubleshooting

Symptom	Possible Cause	Corrective Action
Remote control will not transmit	Batteries	Verify batteries are functional and installed correctly.
	Remote control is in Child Lock mode	Disengage Child Lock mode.
	Buttons not being pressed firmly	Press button firmly for one to two seconds to ensure transmission to module.
Control module will not take commands from remote control	Control module is not in "REMOTE" mode	Ensure module switch is set to REMOTE.
	Control module and remote control are not programmed to each other	The control module will beep when it successfully receives a command. If it does not beep, clear module memory and reprogram wall switch.
	Control module is unplugged. In case of power outage, backup batteries are depleted or missing	If the transmission indicator comes on when power button is pressed, verify that the control module is plugged in the fireplace junction box located in the controls area. Also verify that the batteries are installed in the battery pack.
Fan does not turn on when fireplace is started	Built in time delay	The fireplace must run for three minutes in order for the fan to engage.
Fan does not turn off when fireplace turned off	Built in time delay	The fan will run for twelve minutes after the fireplace is turned off.
Fireplace shuts down after extended periods	Built-in timer	The fireplace will automatically shut down after nine hours of continuous operation if it does not receive a command from the remote.
Fireplace is on but will not shut off with the remote control	External wired wall switch	The fireplace cannot be turned off by remote if an external wired switch is installed and in the ON position. Turn external wall switch to OFF.
	Remote control or control module failure	At control module, turn off fireplace by sliding the ON/OFF/REMOTE switch to OFF. Warning! Risk of Burns! Fireplace is hot. Use caution when accessing module.

Please contact your Hearth & Home Technologies dealer with any questions or concerns.  
 For the location of your nearest Hearth & Home Technologies dealer,  
 please visit [www.hearthnhome.com](http://www.hearthnhome.com).