



**SIT**Group

## PROFLAME GTMF



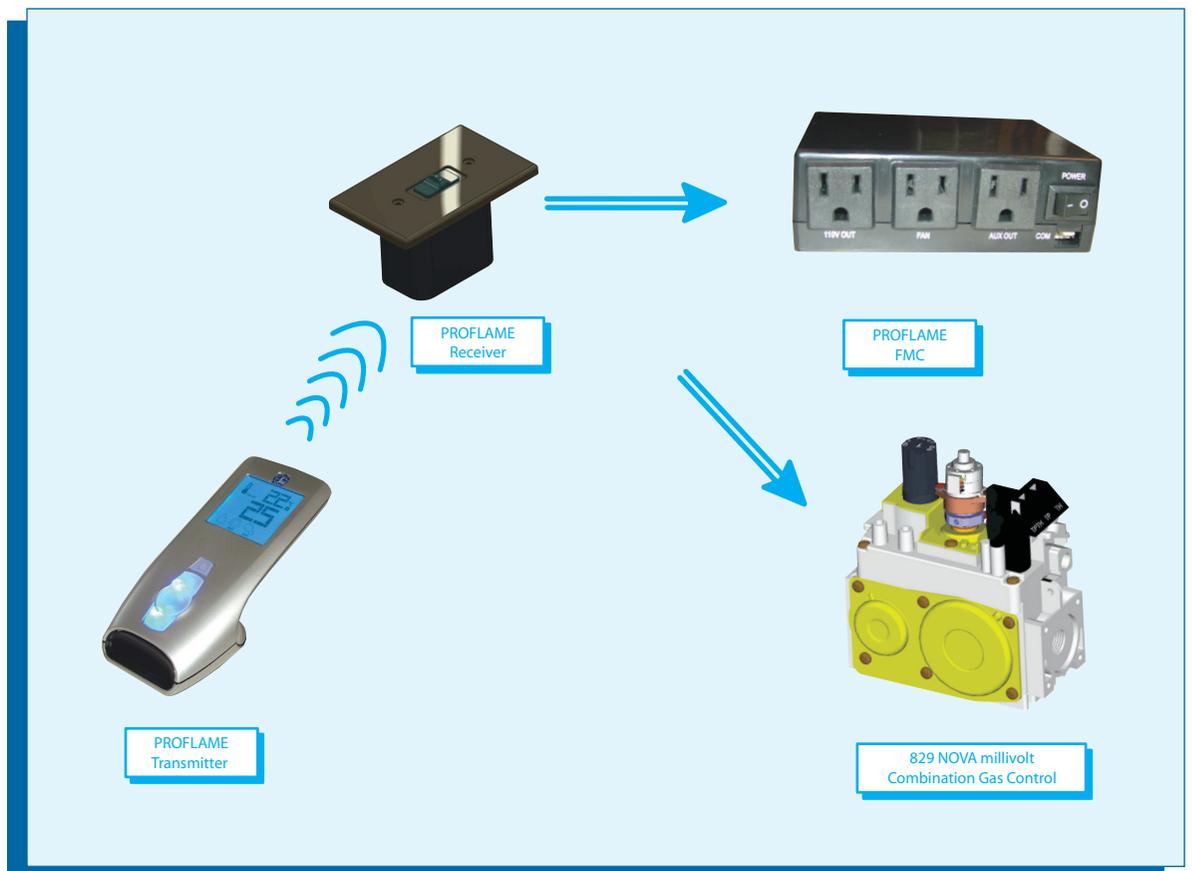
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### ADVANCED REMOTE CONTROL SYSTEM



The Proflame is a modular remote control system that directs the many functions of today's hearth appliances. In its basic form, it is configured to control the on/off operation of the main burner and to provide thermostatic control of the appliance. The system can be progressively upgraded to include the control of the flame height, the fan speed, a remote actuated 120/60 Hz power outlet and a Split Flow burner control. Comfort control is advanced by the Smart thermostat feature which automatically modulates flame height optimizing temperature management and room ambiance.

The Proflame is specifically developed to be used together with the 829 NOVA mV multifunctional gas control or with the 820 NOVA mV converted with the step motor modulating kit.





## MAIN CHARACTERISTICS

- Remote Control with ergonomically positioned push buttons and large LCD display with back light
- Thermostat function
- Smart Thermostat Function
- Fan speed controlled from off through four (4) levels
- Remote actuated 120V auxiliary outlet
- Constant 120V outlet
- Child lock
- Backup function

## TECHNICAL DATA

### REMOTE CONTROL

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<b>Supply voltage:</b>	4.5 V (three 1.5 V AA batteries)
<b>Ambient temperature ratings:</b>	-40 to 60 °C (-40 to - 140 °F)
<b>Radio frequency:</b>	315 MHz

### RECEIVER

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<b>Supply voltage:</b>	6.0 V (four 1.5 V AAA batteries)
<b>Ambient temperature ratings:</b>	-40 to 60 °C (-40 to - 140 °F)
<b>Radio frequency:</b>	315 MHz

### FAN CONTROL MODULE

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<b>Supply voltage/frequency:</b>	120 V / 60 Hz
<b>Ambient temperature ratings:</b>	-40 to 60 °C (-40 to - 140 °F)
<b>Four wires bus:</b>	two wires to provide DC voltage to the receiver; one wire gives uni-directionally signal from the receiver
<b>Output voltage/frequency/current:</b>	120 V / 60 Hz / 15 A
<b>Aux switched output:</b>	120 V / 60 Hz / 2 A
<b>Fan speed output:</b>	120 V / 60 Hz / 1.5 A



## SYSTEM DESCRIPTION

The PROFLAME System consists of three elements:

1. PROFLAME Transmitter.
2. The PROFLAME Receiver with the necessary wiring harness for component connections.
3. The PROFLAME Fan Control Module (FCM) Valve.

The PROFLAME System complements any 820 NOVA millivolt Combination Gas Control and ones equipped with an 829 STEPPER MOTOR modulating kit.

### REMOTE CONTROL

The Proflame Transmitter uses the latest digital technology, see Fig. 1.

A Mode key is provided to Index between the various features and a separate Thermostat key is used to cycle between Off, On and Smart Thermostat functions.

Various icons are shown in the Remote Control display, see fig. 2.



Fig. 1: PROFLAME Transmitter.

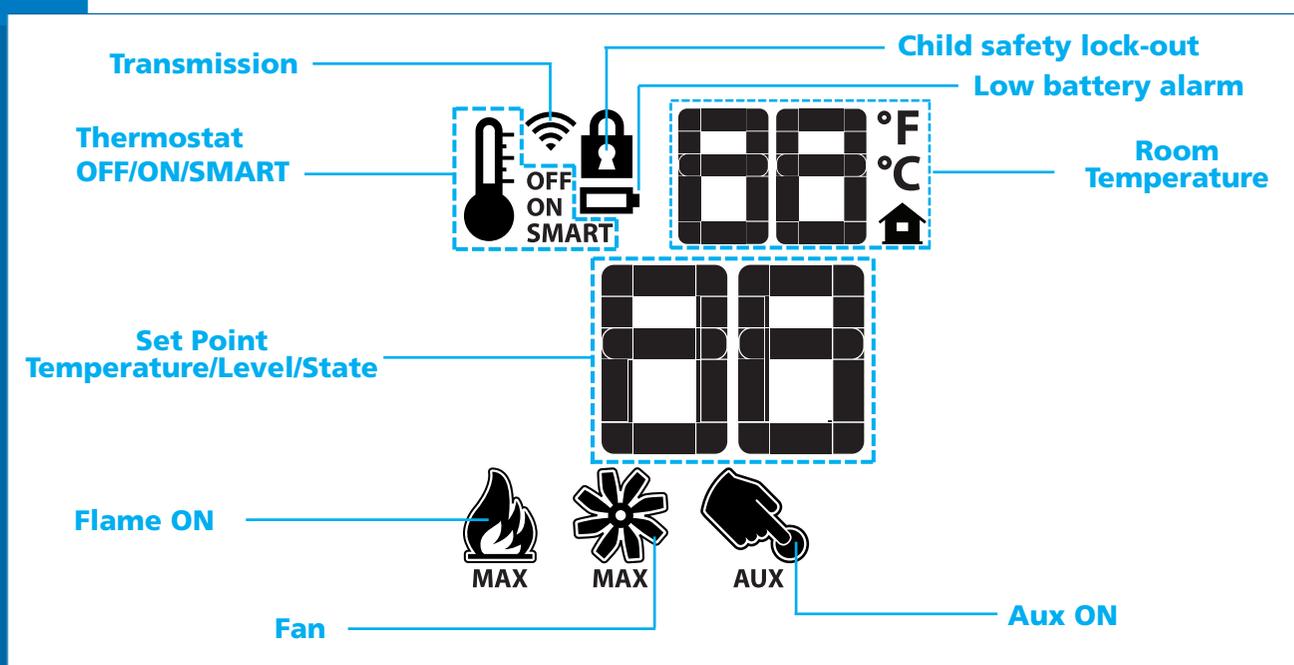


Fig. 2: Remote Control display.

## RECEIVER

The PROFLAME Receiver may be installed in a standard single gang wall switch box or in a low temperature area of the hearth appliance. The receiver accepts commands from the transmitter to operate the functions included with a particular Proflame system configuration. The receiver can be set to one of three positions: On (manual override), Command (remote control) or Off.



Fig. 3: Remote Control display.

## FAN CONTROL MODULE

Fan Control Module (FCM) is available and offers the ability to control fan speed from Off through 4 speeds, a remotely actuated 120V auxiliary outlet, a constant 120v outlet and feeds DC power to the receiver saving the batteries until there is an interruption of line power.

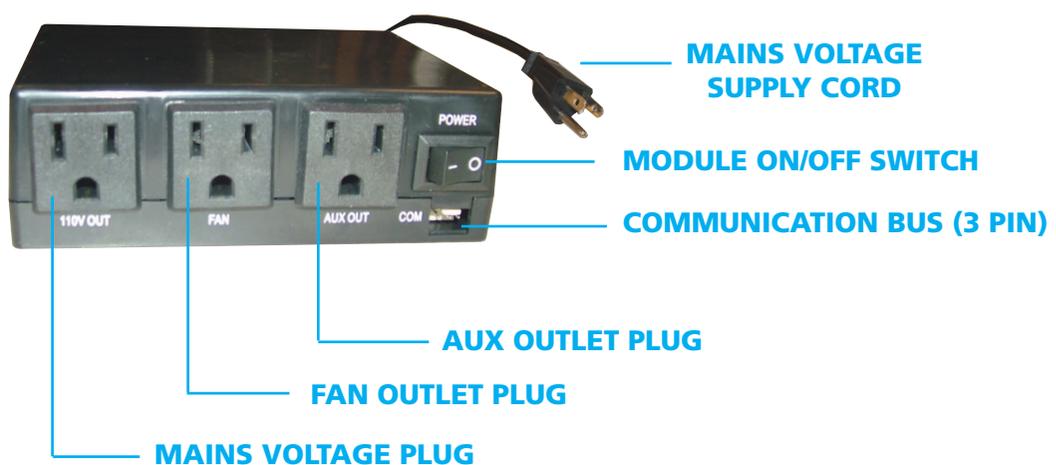


Fig. 4: Fan Control Module.



# INSTALLATION

The PROFLAME System is designed to command uniquely the 820 NOVA millivolt Combination Gas Control, the 820 NOVA mV converted with the STEP MOTOR modulating kit or the 829 mV. The wiring diagram of all the electrical connections is shown in Fig. 5.

Particularly shown are three main elements of the system.

The Fan Control Module, Receiver an 820 and 829 Nova mV Gas Valve can all be connected by single wire harness.

The FCM provides for a constant 120V outlet, Fan speed control and constantly powered 120V Auxiliary outlet.

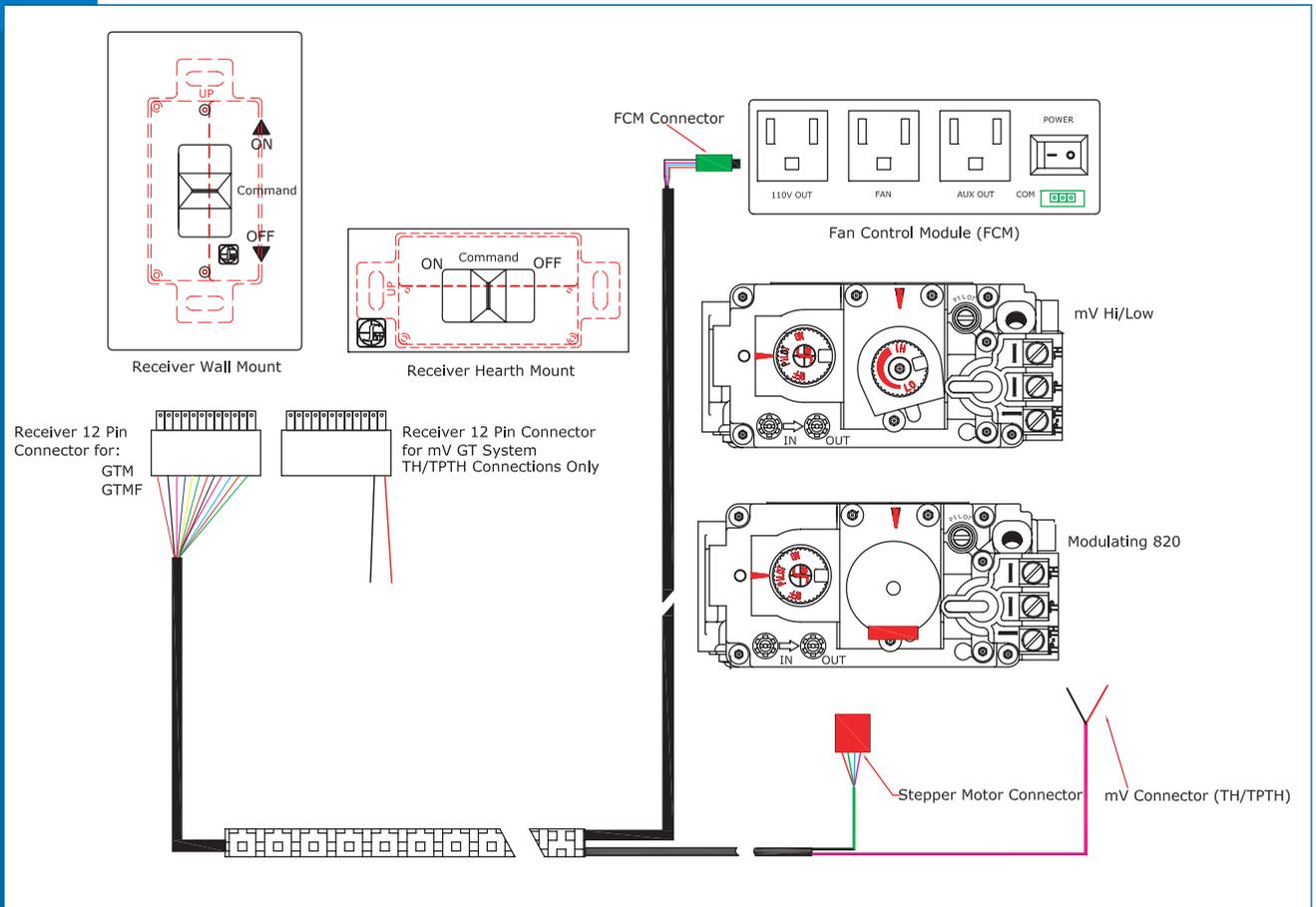


Fig. 5: Wiring diagram.

## FEATURES

### FUNCTIONALITY OF THE RECEIVER

The Receiver is supplied by four (4) AA batteries. The receiver accepts commands via radio signal sent from the transmitter. The receiver sends commands by the wire harness to the various components of the system. When the system is turned on the Receiver performs a calibration of the stepper motor after which an acoustic signal ("beep") is generated to indicate the Receiver is ready to receive commands from the Remote Control.

## FUNCTIONALITY OF THE REMOTE CONTROL

When the batteries are installed into the Remote control the icon "little house" with the measurement of the room temperature will be shown by the display; see Fig. 6. This indication will always be present when the Remote Control has battery power.

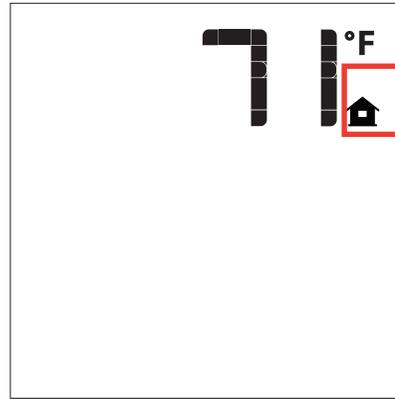


Fig. 6: Remote Control display.

## COMMUNICATION BETWEEN THE REMOTE CONTROL AND THE RECEIVER

To program the transmitter to the receiver, a small key is inserted into the hole marked PRG. The receiver "beeps" three (3) times to indicate that it is ready to accept a new remote transmitter. As soon as it receives the first correct command from any Proflame remote control it captures the new address and then "beeps" four (4) times to confirm the synchronization and command execution.

## FAHRENHEIT - CELSIUS TEMPERATURE INDICATION

It is possible to set the Remote Control to display the temperatures in degree either Fahrenheit or Celsius.

With the system in OFF position, press Thermostat Key and Mode Key at the same time to toggle from °F to °C and vice versa.

The display will show the selected unit of measure, see Fig. 7.

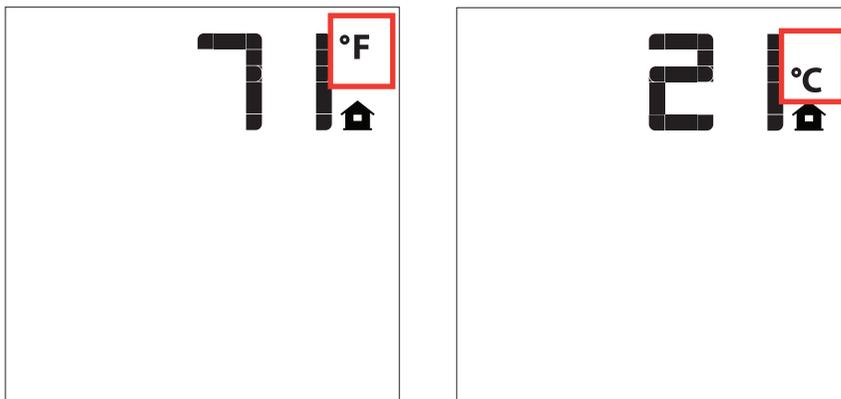


Fig. 7: Remote Control display in Fahrenheit and Celsius.

## TURN ON THE APPLIANCE

When the ON/OFF key is pressed, other icons (depending on the state the system when turned off) will become visible on the LCD display. This indicates that the Remote Control is switched on. At the same time the Receiver connects the thermopile to the gas valve millivolt coil and the appliance main burner turns on in the high position. An acoustic signal from the Receiver confirms the reception of the command.

## TURN OFF THE APPLIANCE

If the appliance and the Remote Control are switched on, when the ON/OFF key is pressed, the Remote control is turned off. At the same time the Receiver removes power from the gas valve millivolt coil and the appliance main burner turns off. An acoustic signal from the Receiver confirms the reception of the command.



## FLAME HEIGHT

This function allows remote control of the flame height through five (5) levels.

Select the manual flame height function using the MODE key until a flame is shown to the left corner of the display (see Fig. 8).

Use the UP / DOWN arrow key to set the desired flame height. Five flame levels are available, see Fig. 9.

An acoustic signal from the Receiver confirms the reception of the command.

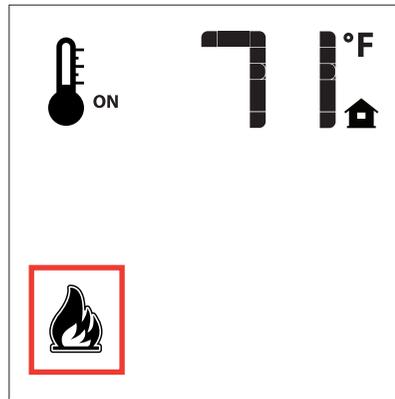


Fig. 8: flame minimum

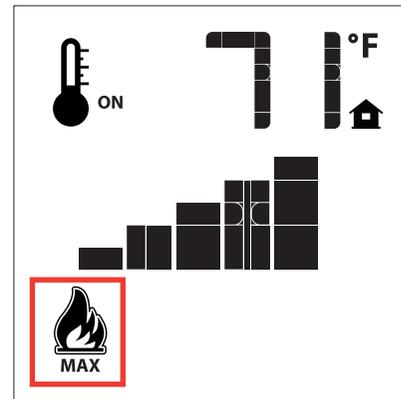


Fig. 9: flame maximum

## ROOM THERMOSTAT

The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in the room.

To activate this function press the THERMOSTAT key this will turn the thermostat function on. The word ON will appear to the right of the temperature bulb graphic, see Fig. 10.

Then use the UP/DOWN arrow key to set the desired room temperature, see Fig. 11. The control system will cycle the appliance on or off to maintain the selected temperature.

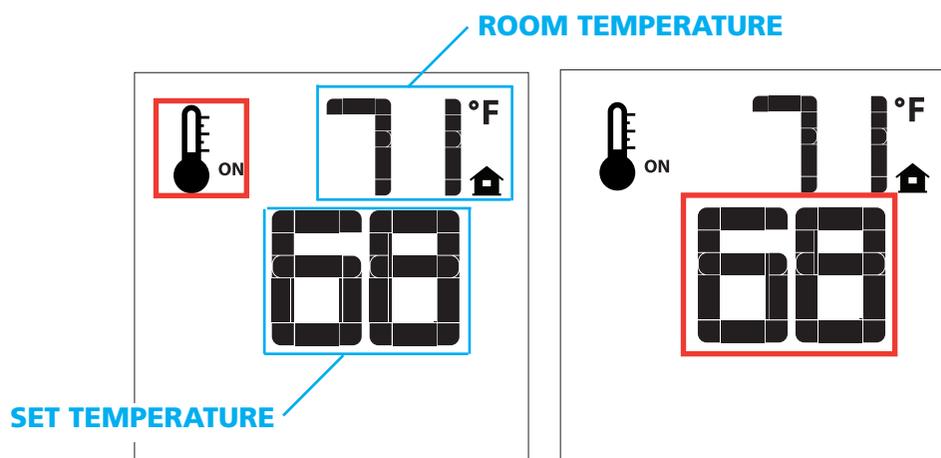


Fig. 10

Fig. 11

## SMART THERMOSTAT

The Smart Thermostat adjusts the flame height in accordance to the difference between the set point and the room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. If the room temperature is cool the Smart function will modulate the flame up.

To activate this function press the THERMOSTAT key until the word "SMART" appears to the right of the temperature bulb graphic, see Fig. 12. Then use the UP/DOWN arrow key to set the desired room temperature, see Fig. 13. The control system will cycle the appliance on or off to maintain the selected temperature.

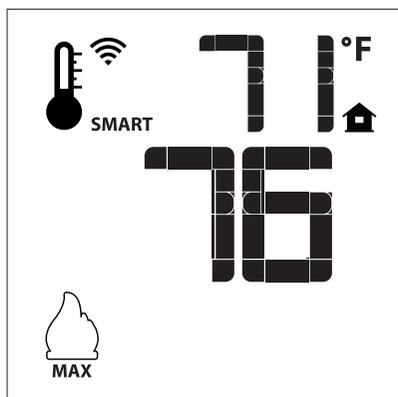


Fig. 12: Smart flame function

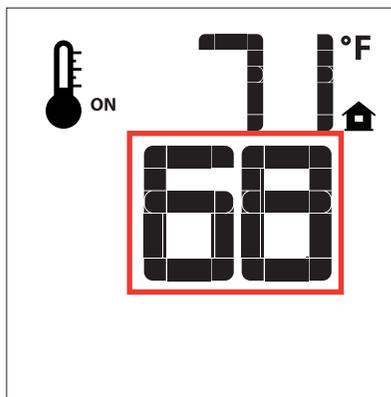


Fig. 13

## FAN SPEED CONTROL

This function controls the speed of the hot air circulating fan if the appliance is equipped with one.

The fan speed can be set from off to one of four (4) levels. To activate this function use the Mode key to set the relevant icon on the display, see Fig. 14. Then use the UP/DOWN arrow key to set the desired fan speed or turn off, see Fig. 15. An acoustic signal is generated to confirm the reception of the command.

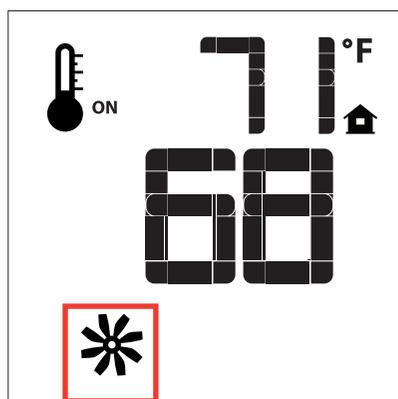


Fig. 14

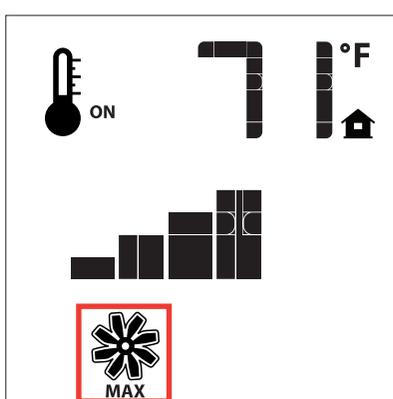


Fig. 15



## REMOTE ACTUATED 120V AUXILIARY OUTPUT

The auxiliary function allows switching of one additional electrical accessory on and off. To activate this function use the Mode key to activate the relevant icon, see Fig. 16. Then use the UP/DOWN arrow key to set ON or OFF the auxiliary output, see Fig. 17. An acoustic signal is generated to confirm the reception of the command.



Fig. 16

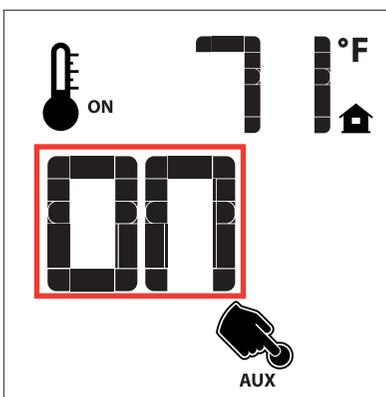


Fig. 17

## CHILD SAFETY LOCK-OUT

With this function it is possible to deactivate the remote control keys. The function is active when the lock icon is lit, see Fig. 18.

To activate this function press simultaneously the MODE key and the UP arrow key.

To deactivate this function press simultaneously the MODE key and the UP arrow key.

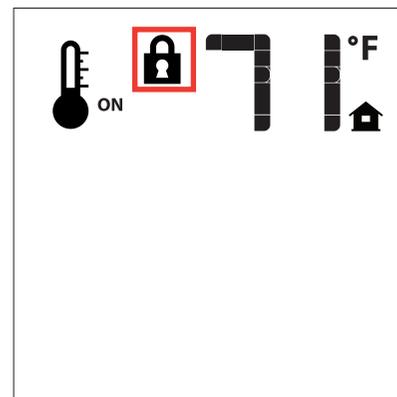


Fig. 18

## LOW BATTERY DETECTION

The duration of the Remote Control batteries depends on many factors: the quality of the batteries used, the number of ignitions of the appliance, the number of changes to the flame height, etc.

When the transmitter batteries are low, an icon will be displayed on the LCD display (see Fig. 19) to alert of a low battery condition before losing battery power at all. As soon as the depleted batteries are replaced, the Transmitter will restart its normal operation.

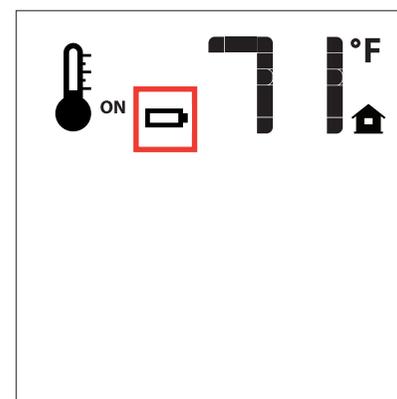
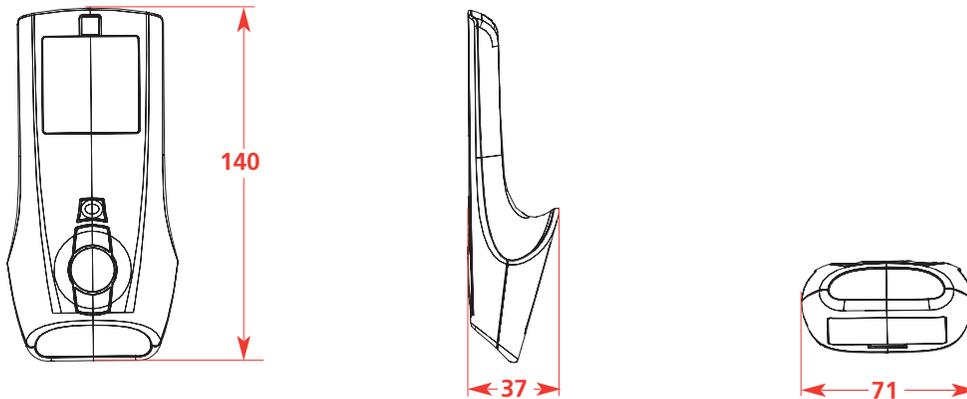


Fig. 19

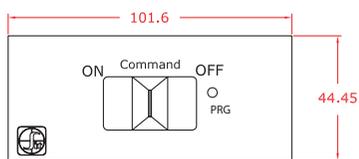
## BACKUP FUNCTION

When the FCM is used, the communication bus provides supply voltage to the Receiver. If the main power is lost, the Receiver continues to operate since it is supplied by internal batteries. The appliance can be switched on manually by moving the 3 position slider switch on the Receiver to the ON position.

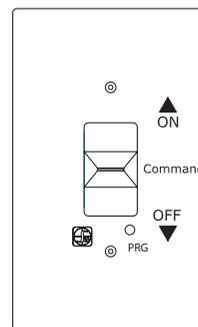
# DIMENSIONAL DRAWINGS



**PROFLAME Transmitter**

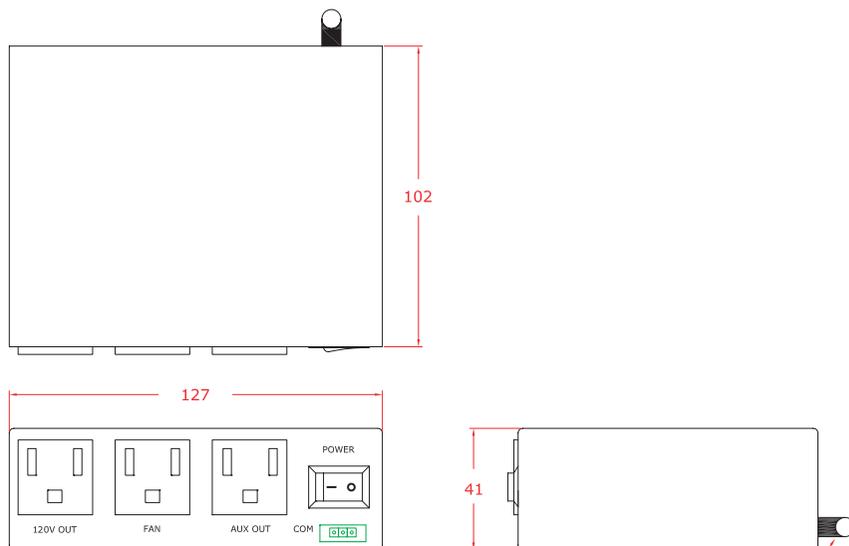


**Hearth mounted**



**Wall mounted**

**PROFLAME Receiver**



**PROFLAME FCM**

120V AC  
Power IN  
Standard 3  
Prong Plug

Dimensions are in millimeters

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