





**ADVANCED REMOTE CONTROL SYSTEMS** 



The Proflame is a modular remote control system that directs the functions of a hearth appliance.

The Proflame GT is its basic form. The Proflame GT is configured to control the on/off operation of the main burner and provides thermostatic control of the hearth appliance.

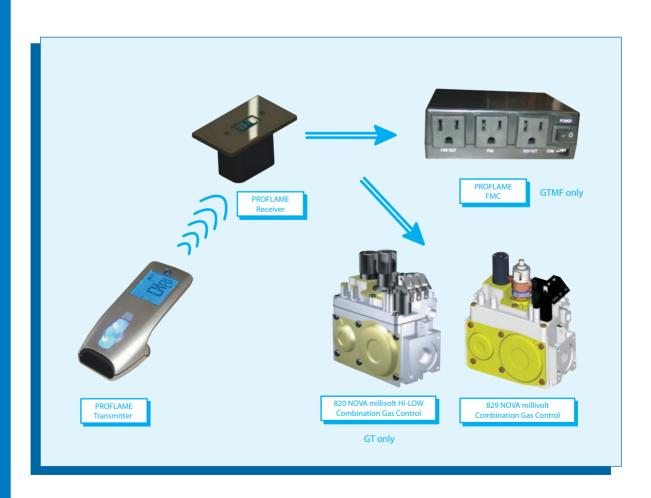
The Proflame GT is specifically developed to be used together with the 820 NOVA mV multifunctional gas control.

The system can be progressively updated to GTM and GTMF.

The Proflame GTM is configured to control the on/off main burner operation, its flame levels and provides on/off and Smart thermostatic control of the hearth appliance.

The Proflame GTMF system, includes the GT & GTM features and adds a remote actuated 110V outlet, Fan speed control (6 levels) and a constantly powered 110V outlet.

The Proflame GTM and the Proflame GTMF are 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**

Feature	Icon	Proflame GT	Proflame GTM	Proflame GTMF
Room Temperature Display		•	•	•
Child Lock	a	•	•	•
Low Battery	<b>-</b>	•	•	•
On/Off Thermostat	ON ON	•	•	•
Flame On/Off only	MAX	•		
Flame On/Off & Modulation (6 Levels)	MAX		•	•
Smart Thermostat	SMART		•	•
Fan Speed Control (6 Levels)	₩ MAX			•
On/Off Auxiliary Outlet (110V)	AUX			•
Constant Outlet (110V)				•



# TECHNICAL DATA

#### REMOTE CONTROL

**Supply voltage:** 4.5 V (three 1.5 V AAA batteries)

0 to 50 °C (32 to 122 °F) **Ambient temperature ratings:** 

Radio frequency: 315 MHz

#### **RECEIVER**

Supply voltage: 6.0 V (four 1.5 V AA batteries) **Ambient temperature ratings:** 0 to 60 °C (32 to 140 °F)

**Radio frequency:** 315 MHz

#### FAN CONTROL MODULE (PROFLAME GTMF only)

**Supply voltage/frequency:** 120 V / 60 Hz

**Ambient temperature ratings:** 0 to 60 °C (32 to 140 °F)

Three wires bus: two wires to provide DC voltage to the receiver;

one wire gives uni-directionally signal from the receiver

**Output voltage/frequency/current:** 

120 V / 60 Hz / 15 A Aux switched output: 120 V / 60 Hz / 2 A Fan speed output: 120 V / 60 Hz / 1.5 A



## SYSTEM DESCRIPTION

The Proflame Remote Control System consists of three elements:

- 1. Proflame Transmitter.
- 2. Proflame Receiver and wiring harness to connect the receiver to the gas valve, stepper motor and Fan Control Module.
- 3. Proflame Fan Control Module (FCM), GTMF only.

#### TRANSMITTER (Remote Control with LCD Display)

The Proflame Transmitter uses a streamline design with a simple button layout and informative LCD displaywith blue back light (Fig.1). The transmitter is powered by 3 AAA type batteries.

A Mode key is provided to index between the features and a Thermostat key Is used to turn on/ off or index through thermostat functions (Fig. 1 & 2).



Fig. 1: Proflame Transmitter.

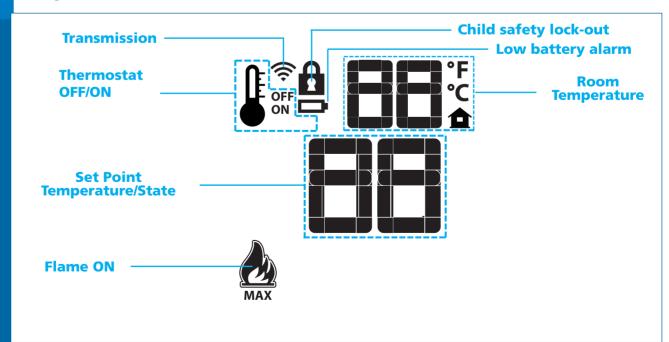


Fig. 2A: Transmitter LCD display (Proflame GT configuration)



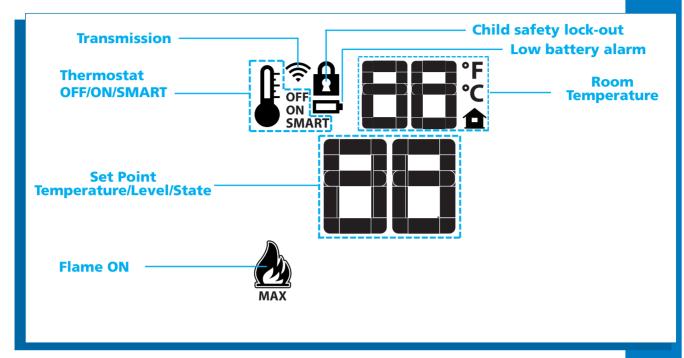


Fig. 2B: Transmitter LCD display (Proflame GTM configuration)

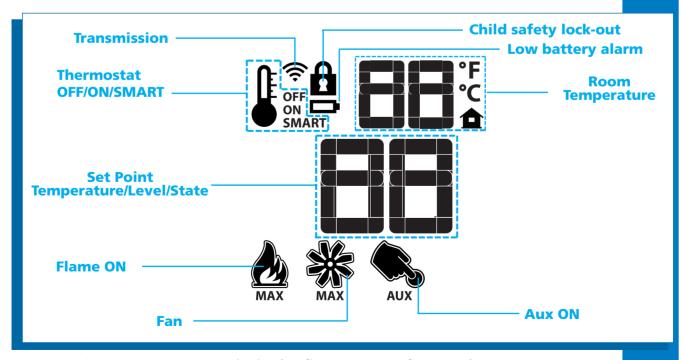


Fig. 2C: Transmitter LCD display (Proflame GTMF configuration)



#### RECEIVER

The Proflame Receiver (Fig. 3) connects directly to the gas valve and stepper motor and Fan Control Module with a wiring harness. The receiver is powered by 4 AA type batteries. The receiver accepts commands via radio frequency from the Transmitter to operate the appliance in accordance with with the particular Proflame system configuration. The Receiver three position slider switch can be set to one of three positions: ON (Manual Override), Remote (Remote control) or Off.

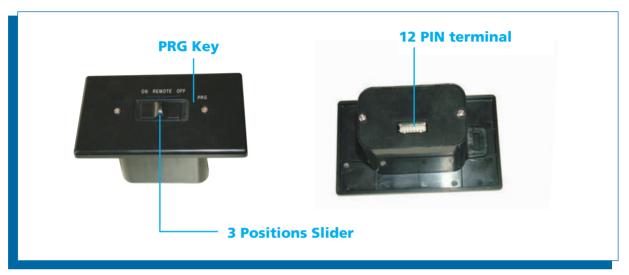


Fig. 3: Proflame Receiver body.

#### FAN CONTROL MODULE (PROFLAME GTMF only)

Fan Control Module (FCM) offers the added ability to control the fan speed from off through six (6) speeds, a remotely actuated 120V outlet and a constantly powered 120V outlet. The FCM provides DC power to the receiver allowing the batteries to be used only when line power is interrupted or lost (Fig.4).

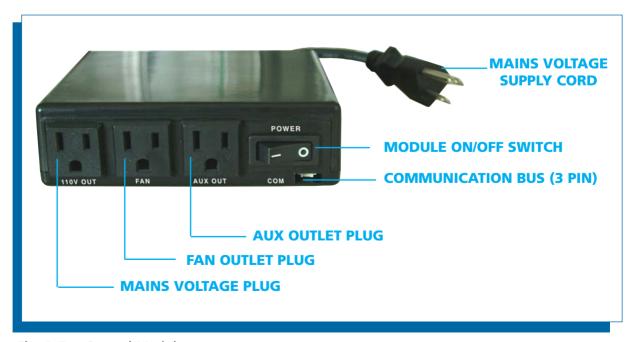


Fig. 4: Fan Control Module.



## INSTALLATION

#### Receiver

The receiver can be placed inside a standard junction type wall box or a low temperature area of the appliance.

#### **Wall Mounting**

- 1. Connect the wiring harness to the back of the receiver.
- 2. Install the receiver in the Junction box using the existing J box screws. (Fig. 5)
- 3. Insert the 4 AA type batteries in the battery compartment with the correct polarity.
- 4. Place the slider into the cover plate.
- 5. Put the receiver switch in the "OFF" position.
- 6. Make sure the receiver and cover plate words "ON" and "UP" are on the same side.
- 7. Align the slider with the switch on the receiver and couple the switch into the slider.
- 8. Align the screw holes.
- 9. Using the two (2) screws provided secure the cover plate to the receiver.

#### **Hearth Mounting**

- 1. Connect the wiring harness to the back of the receiver.
- 2. Install the 4 AA type batteries in the battery compartment with the correct polarity.
- 3. Make sure the receiver and cover plate words "ON" and "UP" are on the same side.
- 4. Place the slider into the cover plate.
- 5. Align the slider with the switch on the receiver and couple the switch into the slider.
- 6. Using the two (2) screws provided secure the cover plate to the receiver.

#### Fan Control module (PROFLAME GTMF only)

The FCM can be placed in a low temperature area of the appliance.

#### Connecting to the Gas Valve (PROFLAME GT only)

The wiring harness for the Proflame GT system has two wires labeled "TP" & "TPTH". Connect the

wires to the gas valve as labeled. (TH to TH and TPTH to TPTH) (Fig. 6A)

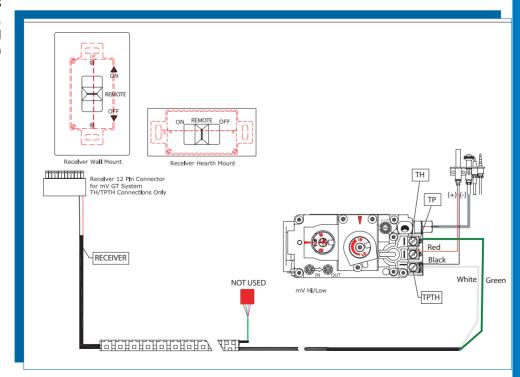
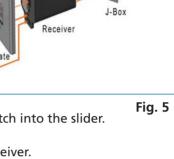


Fig. 6A: Proflame GT wiring diagram.





#### Connecting to the Gas Valve and FCM (PROFLAME GTM only)

The wiring harness for the Proflame GTM system has two wires labeled "TH" & "TPTH". Connect the wires to the gas valve as labeled. (TH to TH and TPTH to TPTH). Additionally there are connectors labeled "Motor" and "COM". Connect the "Motor" connector to the stepper motor on the gas valve (Fig. 6B). The COM connector is not used.

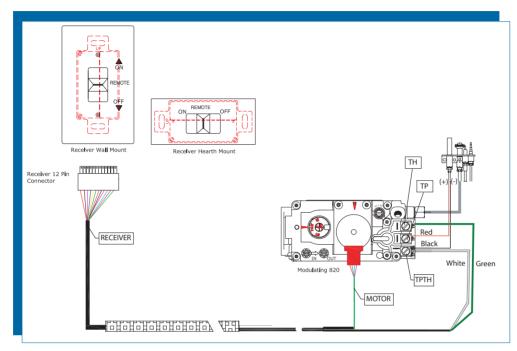


Fig. 6B: Proflame GTM wiring diagram.

## Connecting to the Gas Valve and FCM (PROFLAME GTMF only)

The wiring harness for the Proflame GTM system has two wires labeled "TH" & "TPTH". Connect the wires to the gas valve as labeled. (TH to TH and TPTH to TPTH). Additionally there are connectors labeled "Motor" and "COM". Connect the "Motor" connector to the stepper motor on the gas valve. Connect the "COM" connector to the Fan Control Module connection labeled "COM" (Fig. 6C).

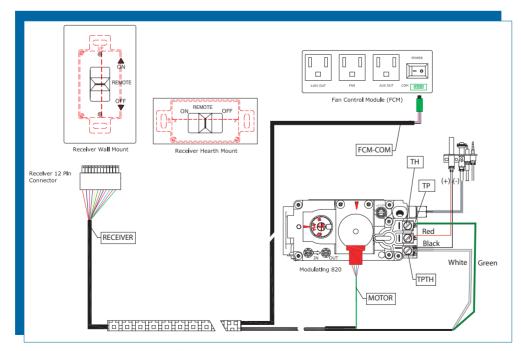


Fig. 6C: Proflame GTMF wiring diagram.



## **OPERATING PROCEDURE**

#### Initializing the System for the first time

Install the 4 AA batteries into the receiver battery bay. Note the polarity of the battery and insert into the battery bay as indicated on the Battery cover (+/-). Place the 3 position slider switch in the "Remote" position. (fig. 3) Using the end of a paper clip, or other similar object, insert the end of the paper clip into the hole marked "PRG" on the Receiver front cover (fig 3). The Receiver will "beep" three (3) times to indicate that it is ready to synchronize with a Transmitter. Install the 3 AAA type batteries in the Transmitter battery bay, located on the base of the Transmitter. With the batteries already installed in the Transmitter, push the On button. The Receiver will "beep" four times to indicate the Transmitter's command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

## **Temperature indication Display**

With the system in the "OFF" position, press the Thermostat Key and the Mode Key at the same time. Look at the LCD screen on the transmitter to verify that a C or F is visible to the right of the Room Temperature display. (Fig. 7)

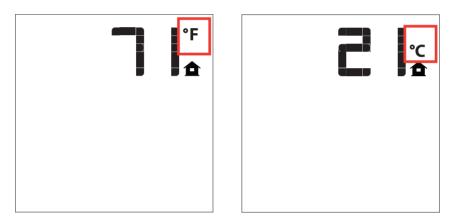


Fig. 7: Remote Control display in Farenheit and Celsius.

#### **Turn on the Appliance**

Press the ON/OFF Key on the transmitter. The transmitter display will show all active Icons on the screen. At the same time the receiver connects the thermopile to the gas valve millivolt coil and the appliance main burner turns on. A single "beep" from the receiver will confirm reception of the command.

#### **Turn off the Appliance**

Press the ON/OFF Key on the transmitter. The transmitter LCD display will only show the room

temperature and Icon (fig. 8). At the same time the Receiver disconnects the thermopile from the gas valve millivolt coil and the appliance burner turns off. A single "beep" from the receiver confirms reception of the command.

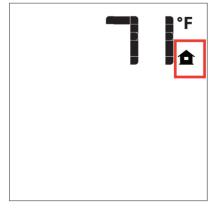


Fig. 8: Remote Control display.



#### **Remote Flame Control**

**Proflame GT**: with the system on, and the flame present in the appliance, pressing the Down Arrow Key will turn off the flame while the remote system is still on. If the Up Urrow Key is pressed while in the above described state the flame will come on. (Fig. 9A & 9D)

**Proflame GTM & GTMF**: has six (6) flame levels. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off.

The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position. (Fig. 9) A single "beep" will confirm reception of the command.



Fig. 9A: Flame Off

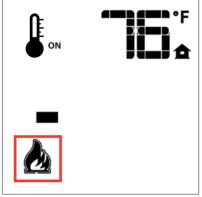


Fig. 9B: Flame Level 1

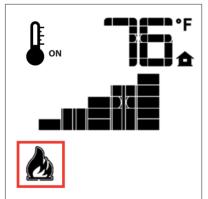


Fig. 9C: Flame level 5



Fig. 9D: Flame Level Maximum



#### **Room Thermostat (Transmitter Operation)**

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

To activate this function, press the Thermostat Key (Fig. 1). The LCD display on the Transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed (Fig. 10). To adjust the set temperature, press the Up or Down Arrow Keys until the desired set temperature is displayed on the LCD screen of the Transmitter (Fig. 11).

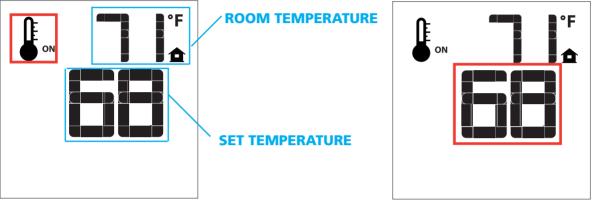
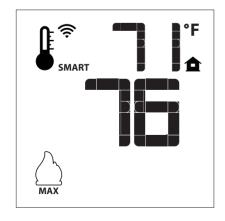


Fig. 10 Fig. 11

#### Smart Thermostat (Transmitter Operation) (Proflame GTM & GTMF only)

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. To activate this function, press the Thermostat Key (Fig. 1) until the word "SMART" appears to the right of the temperature bulb graphic (Fig. 12). To adjust the set temperature, press the Up or Down Arrow Keys until the desidered set temperature is displayed on the LCD screen of the Transmitter (Fig. 13).



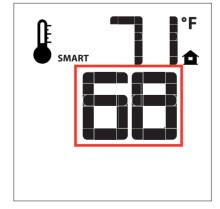


Fig. 12: Smart flame function

Fig. 13



#### Fan Speed Control (Proflame GTMF only)

If the appliance is equipped with a hot air circulating fan, the speed of the fan can be controlled by the Proflame system. The fan speed can be adjusted through six (6) speeds. To activate this function use the Mode Key (fig.1) to index to the fan control icon (Fig. 14). Use the Up/Down Arrow Keys (Fig.1) to turn on, off or adjust the fan speed (fig. 15). A single "beep" will confirm reception of the command.





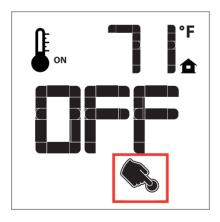
Fig. 14

Fig. 15

## Remote Actuated 120V Auxiliary Outlet (Proflame GTMF only)

The auxiliary function controls the AUX power outlet on the Fan Control Module. To activate this function use the Mode Key (fig. 1) to index to the AUX icon (fig. 16 & 17).

Pressing the Up Arrow Key will activate the outlet. Pressing the Down Arrow Key will turn the outlet off. A single "beep" will confirm the reception of the command.



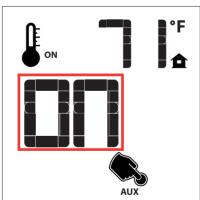


Fig. 16

Fig. 17



### **Key lock**

This function will lock the keys to avoid unsupervised operation.

To activate this function, press the MODE and UP keys at the same time (fig. 18).

To de-activate this function, press the MODE and UP keys at the same time.

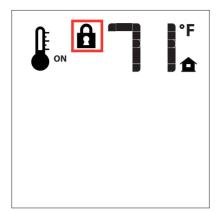


Fig. 18

#### **Low Battery Power detection**

#### **Transmitter**

The life span of the remote control batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point, etc.

When the transmitter batteries are low, an Icon will appear on the LCD display of the transmitter (Fig. 19) before all battery power is lost. When the batteries are replaced this Icon will disappear.

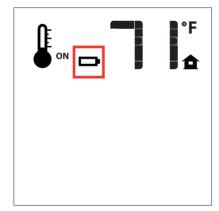


Fig. 19

## **Receiver**

The life span of the receiver batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point, etc.

When the receiver batteries are low, No "beep" will be emitted from the receiver when it receives an On/Off command from the transmitter. This is an alert for a low battery condition for the receiver. When the batteries are replaced the "beep" will be emitted from the receiver when the ON/OFF key is pressed (See Initialization of The System).

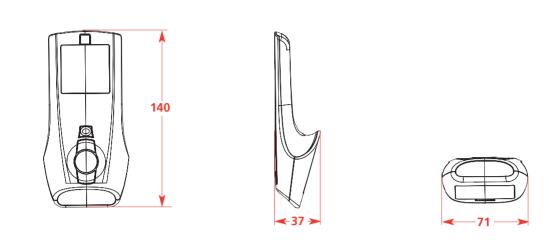


## Manual Bypass of the Remote System

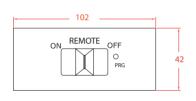
If the batteries of the Receiver or Transmitter are low or depleted, the appliance can be turned on manually by sliding the three position slider switch on the Receiver to the ON position. This will bypass the remote control feature of the system and the appliance main burner will come on if the gas valve is in the "On" position.



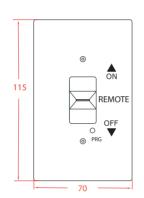
# **DIMENSIONAL DRAWINGS**



**PROFLAME Transmitter** 

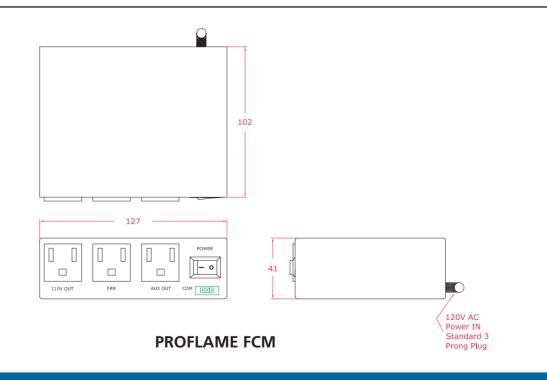


**Hearth mounted** 



Wall mounted

## **PROFLAME** Receiver



**Dimensions are in millimeters** 



SIT La Precisa S.p.A.
Viale dell'Industria 31-33
35129 PADOVA - ITALY
Tel. +39/049/829.31.11, Fax +39/049/807.00.93
www.sitgroup.it - e-mail: mkt@sitgroup.it