

## GV60 Remote Electronic Ignition and Control System



### OPERATING INSTRUCTIONS - FOR OEM USE ONLY



Figure 1



Figure 2



Figure 3



Figure 4

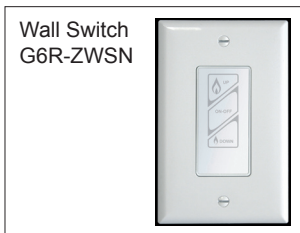


Figure 5



Figure 6

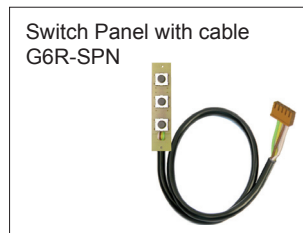


Figure 7

#### ⚠ WARNING

Fire or explosion hazard. Attempted disassembly or repair of controls can cause property damage, severe injury or death. Do not disassemble the gas valve; it contains no serviceable components.

Read these instructions carefully. Failure to follow them could result in a fire or explosion causing property damage, personal injury, or loss of life. The product must be installed and operated according to all local regulations.

A. **BEFORE OPERATING** verify that no gas is in the area around the appliance, including near the floor.

#### WHAT TO DO IF YOU SMELL GAS:

- Do not light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call the gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

B. Use only your hand to push in or turn the gas control knobs. Never use tools. If a knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

C. Do not use this control or any gas appliance if any part has been under water or in contact with water. Immediately call a qualified service technician to replace the control system and any gas control system which has been under water or in contact with water.

D. These instructions are to be referenced as a user guide, and do not supersede appliance manufacturer's lighting instructions.

#### APPLICATION

GV60 is a battery-powered electronic remote ignition and control system for gas appliances with pilot burners and ODS systems.

#### GENERAL NOTES

##### Radio Frequency Remote

433.92 MHz for Europe;  
315 MHz for U.S. (FCC ID: RTD-G6R) and for Canada (IC: 4943A-G6R).

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, and (2) This device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

##### Batteries - Remote Handset:

1 x 9V block (quality alkaline recommended)

##### Batteries - Receiver:

4 x 1.5V "AA" (quality alkaline recommended)

An AC Mains Adapter may be used instead of batteries (only the Mertik Maxitrol or an AC Mains Adapter approved by Mertik Maxitrol can be used).

**NOTE:** During a power outage the AC Mains Adapter must be unplugged from the receiver to operate in the battery mode.

**AUTOMATIC OPERATION**

**⚠ WARNING**

Wiring of valve and receiver must be completed before starting ignition. Failure to do so could damage the electronics.

**NOTE:** These remote handsets, receiver, wall switches, switch panels and touch pads are not interchangeable with previous versions.

For all lighting/ignition instructions please refer to appliance manufacturer's instructions.


**SETTING THE ELECTRONICS CODE**

(First time use only)

**Radio Frequency Remote**

(see figures 10, 11, 12)

A code is selected automatically for all Mertik Maxitrol electronics from among 65,000 random codes available. The receiver has to learn the code of the handset:

- Press and hold the receiver's reset button (see figure 8) until you hear two (2) acoustic signals. After the second, longer acoustic signal, release the reset button.
- Within the subsequent 20 seconds press the  (small flame) button on the remote handset until you hear an additional long signal confirming the code is set.

**NOTE:** This is a one time setting only, and is not required when changing the batteries in the remote or receiver.

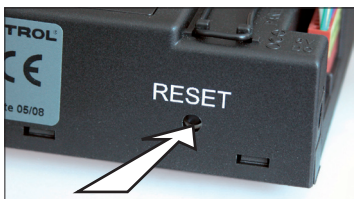



Figure 8: Receiver reset button


**TO TURN ON APPLIANCE**

**⚠ WARNING**

When pilot ignition is confirmed, motor turns automatically to maximum flame height.



- Turn MANUAL knob to the ON, full counterclockwise  position (see figure 16).
- Place ON/OFF switch (if equipped) in **I**(ON position).

**Standard, Display, Timer/Thermostat RF Remote Handset** (see figures 10, 11, 12)

- Simultaneously press and hold the **OFF** and  (large flame) buttons until a short acoustic signal confirms the start sequence has begun; release buttons.

- Continuing signals confirm the ignition is in process.
- Once pilot ignition is confirmed, there is main gas flow.
- After the ignition the remote will go automatically into temperature control mode (CSA-versions) or manual mode (CE-versions).

**Infrared Remote Handset** (see figure 9)

- Simultaneously press and hold  (star) and  (large flame) until a short acoustic signal confirms the start sequence has begun; release buttons.
- Continuing signals confirm the ignition is in process
- Once pilot ignition is confirmed, there is main gas flow.

**Wall Switch/Touch Pad/Switch Panel**

(see figure 13)

- Press and hold button "B" (see figure 13) until a short acoustic signal confirms the start sequence has begun; release button.
- Continuing signals confirm the ignition is in process.
- Once pilot ignition is confirmed, there is main gas flow.

**NOTE:** If the pilot does not stay lit after several tries, turn the main valve knob to OFF and follow the instructions "Turn Off Gas to Appliance" (see page 5).

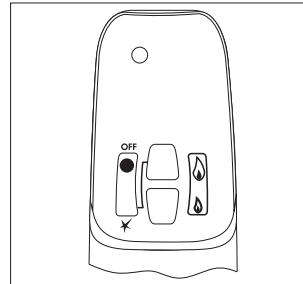


Figure 9: Infrared Remote Handset

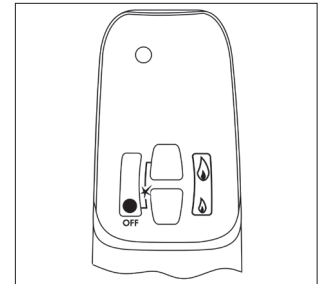


Figure 10: Standard RF Remote Handset

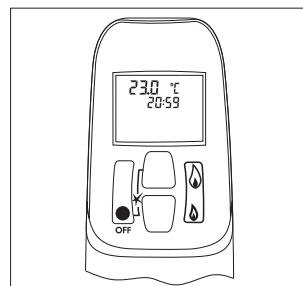


Figure 11: Display RF Remote Handset

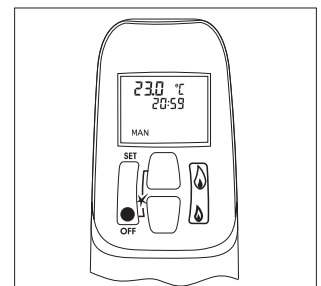


Figure 12: Timer/Thermostat RF Remote Handset

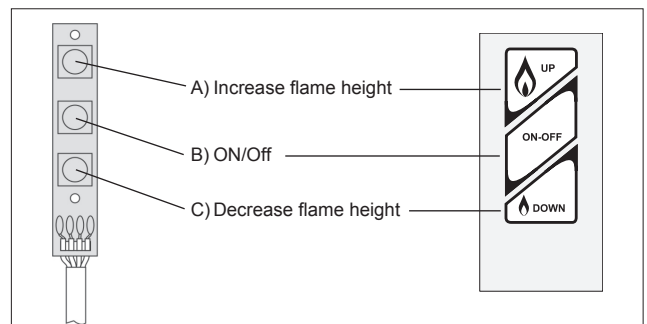


Figure 13: Switch Panel and Wall Switch/Touch Pad

## TO TURN OFF APPLIANCE

Press OFF button on remote handset. Press ON/OFF button on wall switch and touch pad. Press OFF on switch panel (see figure 13 on page 2, button "B").

**NOTE:** Press  (small flame) to turn main gas to pilot gas.

## TO OPEN AND CLOSE SOLENOID VALVE/BURNER

**NOTE:** The latching solenoid valve will not operate for one minute after ignition.

The latching solenoid valve cannot operate manually. If the battery runs down it will remain in the last operating position. During normal operation the solenoid valve will be reset into the ON position when the GV60 is switched OFF remotely.



- Upon ignition both Burner and Decorative Burner are ON.
- Press upper left and lower right button simultaneously to switch the Burner OFF (printed instructions are located on the battery cover, see figure 14).
- Press upper left and upper right button simultaneously to switch the Burner ON. (Display and Timer/Thermostat Remote Handsets: the AUX symbol on the display will indicate that the solenoid valve is OPEN.)






Figure 14: Instructions for Latching Solenoid Valve (backside of the remote)

## ADJUSTMENT - FLAME HEIGHT

**Standard, Display, Timer/Thermostat RF Remote Handsets** (see figures 10, 11, 12)

- In standby mode: Press  (large flame) to increase flame height.
- Press  (small flame) to decrease flame height or to set appliance at pilot flame.
- For fine adjustment tap the large/small flames.

**Infrared Remote Handset** (see figure 9)

- To increase flame height press  (star) and  (large flame) buttons simultaneously.
- Press  (small flame) to decrease flame height or to set appliance at pilot flame.
- For fine adjustment tap the star and large flame or small flame. There is a separate OFF button.

**Wall Switch/Touch Pad/Switch Panel**

(see figure 13)


- Press button "A" to increase flame height.
- Press button "C" to decrease flame height or set appliance at pilot flame.
- For fine adjustment tap the button "A" or "C".

**NOTE:** If the appliance will not operate, follow the instructions "TURN OFF GAS TO APPLIANCE".

## SETTING °C/24 HOUR OR °F/12 HOUR CLOCK

**Display, Timer/Thermostat RF Remote Handsets**





(see figures 11, 12)

- Press OFF and  (small flame) until display changes from Fahrenheit/12 hour clock to Celsius/24 hour clock and vice versa.

## SETTING THE TIME

**Display, Timer/Thermostat RF Remote Handsets**

(see figures 11, 12)

- The display will flash after either:
  - a. Installing the battery or
  - b. Simultaneously pressing the  (large flame) and  (small flame).
- Press  (large flame) to set the hour and the  (small flame) to set the minute.
- Press OFF to return to manual mode or simply wait and it will automatically return to the manual mode.

Remaining Instructions pertain to Timer/Thermostat RF Remote Handset only (see figure 12)

## CHANGING THE MODE OF OPERATION

Briefly pressing the SET button changes the mode of operation in the following order:



**NOTE:** MANUAL mode can also be reached by pressing either the (large flame) or the (small flame).

### Mode - Manual Flame Height Adjustment

- Press (large flame) to turn on the main burner.
- Press (large flame) to increase the flame height.
- Press (small flame) to decrease the flame height or to go to pilot standby position.

**NOTE:** While pressing either button a symbol indicating transmission appears on the display. The receiver confirms transmission with an acoustic signal.

### - Daytime Temperature Mode

(appliance must be in standby mode; pilot ignited):  
The room temperature is measured and compared to the set temperature. The flame height is then automatically adjusted to achieve the Daytime set temperature.

### - Nighttime Setback Temperature Mode

(appliance must be in standby mode; pilot ignited):  
The room temperature is measured and compared to the Nighttime Setback temperature. The flame height is then automatically adjusted to achieve the Nighttime Setback temperature.

### - Timer Mode

(appliance must be in standby mode; pilot ignited):  
The Timer setting allows you to set two (2) burner times and two (2) burner times every 24 hours.

For to operate as a thermostat, TEMP must be set at 40°F (4°C) or higher.

If the setting is decreased to --, the motor will turn the valve to the standby position in the moon times and await the next burner cycle.

**NOTE:** The display shows the set temperature every 30 seconds.

## SETTING THE TEMPERATURE

- Select either the MODE or the MODE by briefly pressing the SET button.
- Hold the SET button until the TEMP display flashes.
- Set the desired temperature with (large flame) or (small flame).
- Press OFF or simply wait to complete programming.

## SETTING THE TIMER

- Select Timer mode by briefly pressing the SET button.
- Press and hold the SET button until the P1 (sun symbol is displayed) and the time flashes. Set the hour by pressing the (large flame) and set the minutes by pressing the (small flame).
- Briefly press SET button for the next burner cycle time.
- Example: P1 (moon symbol) continue through P2 (sun symbol) and P2 (moon symbol).
- Once all four (4) times are set, press OFF or simply wait to complete programming.

## MANUAL OPERATION (see figures 15, 16, pg. 5)

(Only possible, when MANUAL knob is used)

Follow appliance manufacturer's instructions for gaining access to the gas control and the pilot burner. Access to the pilot burner is only required for ignition with a match.

When turning main valve knob, do not force. Knob has a slip clutch that clicks until the end stops are reached. This allows for manual flame height adjustment as well as adjustment to pilot standby position.

1. **STOP!** Read the safety information included before proceeding.
2. Turn main valve knob to the OFF, full clockwise position.
3. Turn MANUAL knob to the MAN, full clockwise position.
4. Place ON/OFF switch (if equipped) in **O** (OFF position).
5. Wait five (5) minutes to clear out any gas. Verify that no gas is in the area around the appliance, including near the floor. **If you detect gas STOP!** Follow "A" in the safety information on page 1. If no gas is present, proceed to step 6.
6. Place ON/OFF switch (if equipped) in **I** (ON position).
7. With the MANUAL knob in MAN position a manual pilot valve operator and piezo igniter (optional) are accessible.



8. Fully push down manual pilot valve operator and hold in, to start pilot gas flow (see figure 15).

**Ignition with match:**

Immediately light the pilot with a match, while continuing to hold in the manual pilot valve operator for about one (1) minute after the pilot is lit. Release manual pilot valve operator. If pilot does not stay lit, wait five (5) minutes and repeat.

**Ignition with piezo igniter:**

Change the ignition cable from the receiver to the valve (see figures 15 and 17). Use the push piezo igniter to ignite. If pilot does not stay lit, wait five (5) minutes and repeat.

**NOTE:** If the pilot does not stay lit after several tries, turn the gas control knob (main valve knob) to **OFF** and proceed to step 11.

9. If applicable, per appliance manufacturer’s instructions, replace pilot access panel before proceeding.
10. Turn **MANUAL** knob to the **ON**, full counterclockwise position.
11. Turn main valve knob to the full **ON**, full counterclockwise position.
12. If the appliance will not operate, follow the instructions “TURN OFF GAS TO APPLIANCE” and call the service technician or gas supplier.

**TURN OFF GAS TO APPLIANCE**

- Press OFF button on remote or wall switch/touch pad/switch panel.
- Follow appliance manufacturer’s instructions for gaining accessibility to the gas control.
- Place ON/OFF switch (if equipped) in **O** (off position).
- Turn main valve knob to the OFF full clockwise position.
- Replace appliance accessibility cover (if applicable), per appliance manufacturer’s instructions.

**MISCELLANEOUS**

**Low Battery Indication**

Receiver:  
three short beeps will sound when motor turns

Standard/Infrared remote:  
the red LED will get darker

Remote with display:  
“BATT” will appear on display

**NOTE:** Pertains to Thermostatic Displays/Handsets:  
If the battery of the handset is low or if the transmitter is out of the communication range, the motor turns down the valve to pilot gas after 6 hours.

**NOTE:** With very low battery the GV60 system shuts off the fire completely. This will not happen if the power supply is interrupted.

**Battery replacement**

Battery replacement is recommended at the beginning of each heating season. Pull ribbon to remove batteries. Do not use metal tools to remove batteries. Using a metal tool could cause a short that may damage the receiver.

**Location of Receiver**

When the RF-receiver is placed in the appliance, the surrounding metal can reduce reception considerably. The position of the antenna on the receiver also influences reception. It is recommended to straighten the antenna. The antenna must not come in contact or cross the ignition wire, this may render the receiver inoperable.

**NOTE:** To keep receiver free from debris, dirt, and humidity, do not remove the receiver from the plastic bag until all construction is complete.

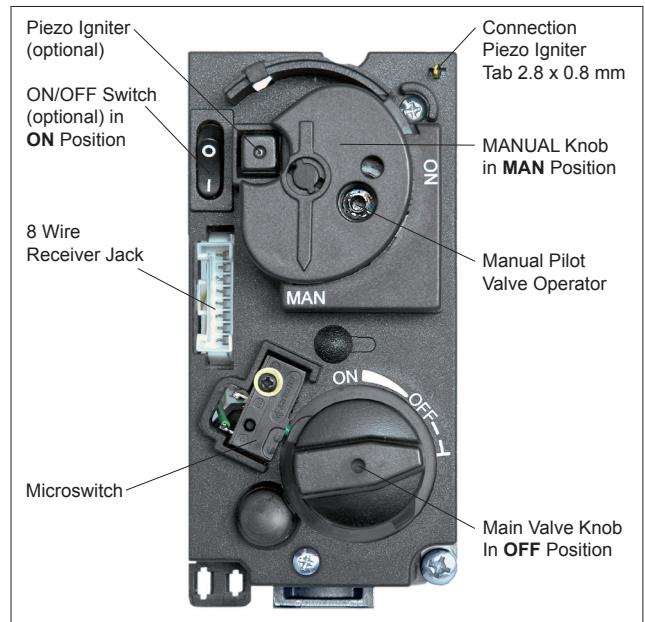


Figure 15: Combination Control, Cover

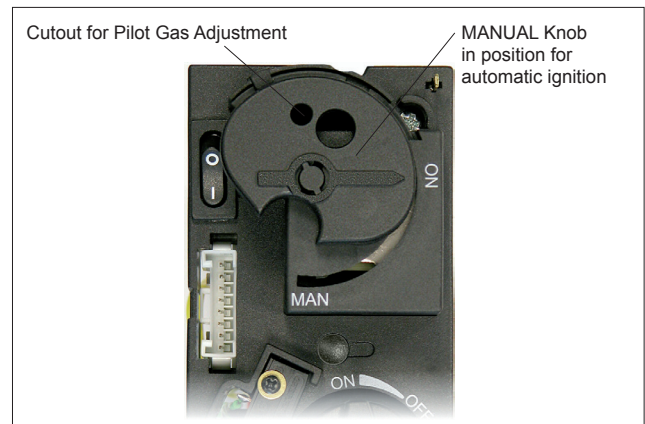


Figure 16: Combination Control, View MANUAL knob

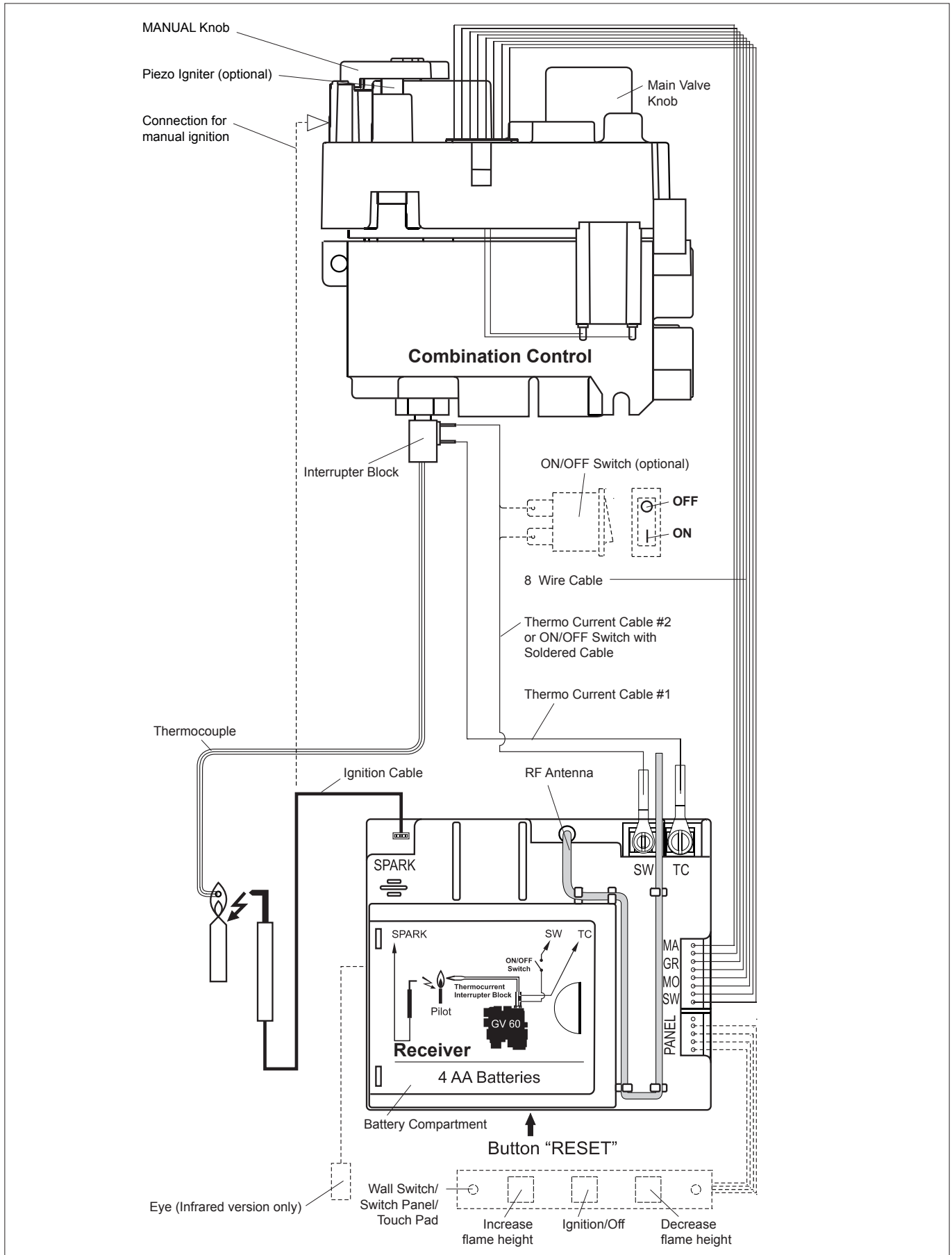


Figure 17: Wiring Diagram