

GV60

Remote Electronic Ignition and Control System



ENGLISH - INSTALLATION AND OPERATING INSTRUCTIONS



FC CE 0085



Precision Engineering for Multiple Markets

MERTIK MAXITROL®

Exclusive Distributor for Maxitrol Company

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IMPORTANT SAFETY INFORMATION

⚠ WARNING

Fire or explosion hazard. 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 codes and local regulations.

Damper position must be in accordance with Manufacturer's Installation Instructions and all applicable Standards. Failure to follow these Instructions and/ or Standards may cause property damage, personal injury, or loss of life.

Do NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this control or other appliances.

WHAT TO DO IF YOU SMELL GAS

- Do NOT operate any appliance.
- Do NOT touch any electrical switch; do NOT use any phone in your building.
- Immediately evacuate the area and contact the gas supplier. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency, or the gas supplier. Installation shall conform with local codes, or in the absence of local codes, in accordance with the National Fuel Gas Code ANSI Z223.1/NFPA 54 or the IFGC or CSA B149.1. All piping and tubing must comply with local codes and ordinances.

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 that has been under water or in contact with water.

⚠ WARNING

ELECTRIC SHOCK HAZARD











- Read these instructions carefully. Failure to follow them could result in property damage, personal injury, or loss of life.
- This control must be electrically wired and operated in accordance with all codes and local regulations. Service and installation must be performed by a trained, experienced service technician.
- DO NOT use the control if you suspect it may be damaged.

NEW GV60 HANDSET DESIGN (2012)

NOTICE

The redesigned GV60 handsets G6R-H...FB and G6R-H...FW operate exactly the same as the previous handset G6R-H... Only the symbols on the buttons have been changed (see "KEY ASSIGNMENTS" for corresponding symbols).

KEY ASSIGNMENTS

G6R-H...FB(W)		G6R-H...
	=	
	=	
	=	
	=	
	=	

APPLICATION

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

COMPONENTS

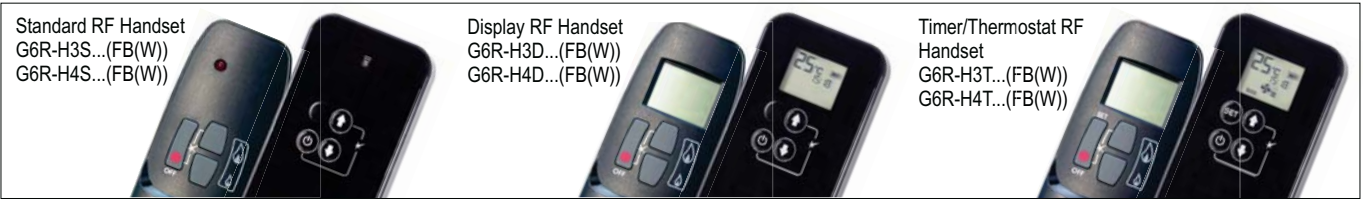


Figure 1: Remotes, on the right side each the redesigned models



Figure 2: Operation

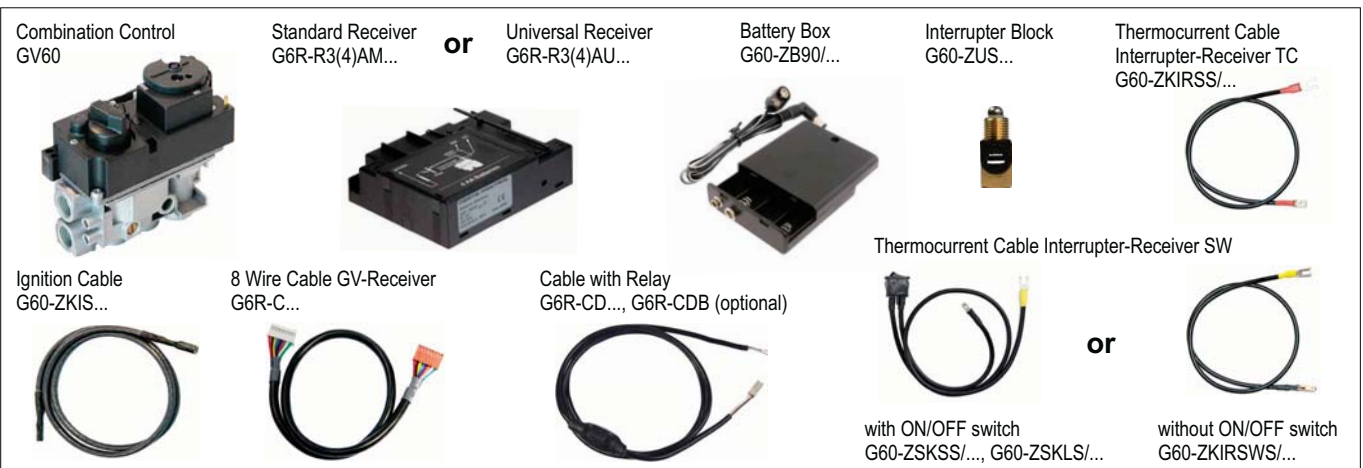


Figure 3: Basic RF



Figure 4: Additional Function RF: FAN – Light/Dimmer – Latching Solenoid



Figure 5: Mains Adapter

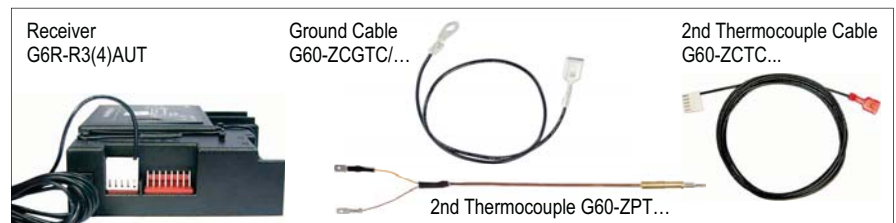


Figure 6: RF 2nd Thermocouple Option



Figure 7: Infrared (IR)

TECHNICAL SPECIFICATIONS

Gas combination control according to CSA or CE approval (see label for certification)

FUELS

- CSA: Suitable for natural, manufactured, mixed gases, liquefied petroleum gases, and LP gas-air mixtures.
- CE: Suitable for use with gases of EN 437 gas family 1, 2 and 3.

APPROVALS

- CSA: ANSI Z21.78/CSA 6.20 for U.S. & Canada, ANSI Z21.20/CSA 6.20 for U.S. & Canada
- CE: Gas Appliances Directive 2009/142/EG and EN 298-2003, DIN EN 126
- Infrared Handset: GADAC Guidance Sheet B12

PRESSURE DROP/CAPACITY

- CSA: 1" W.C. at 65,000 BTU/hr
- CE: 2.5 mbar at 1.2 m³/h air

RANGE OF REGULATION

- CSA: 10,000 to 85,000 BTU/hr
- CE: Class C according EN 88

REGULATOR ADJUSTMENT

- CSA: 3" W.C. to 5" W.C. (7.5 to 12.5 mbar); 8" W.C. to 12" W.C. (20 to 30 mbar)
- CE: 5 to 40 mbar
- CE+CSA: 3" W.C. to 12" W.C. (7.5 to 30 mbar)
- Convertible Regulator: 3 to 4.5" NG/8.5 to 11.5" LP

MOUNTING POSITION

Mount valve 0° to 90°, in any direction (including vertically) from the upright position of the gas control knob.

MAXIMUM INLET PRESSURE

- CSA: ½ psi (34.5 mbar)
- CE: 50 mbar (20" W.C.)

MAIN GAS CONNECTION

- CSA: ¾ in. NPT; Rp ¾ ISO 7-1 internal thread for 12 mm, 10 mm, 8 mm, 6 mm outside diameter tube.
- CE: Rp ¾ ISO 7-1 internal thread for 12 mm, 10 mm, 8 mm, 6 mm outside diameter tube.

INLET AND OUTLET CONNECTION

Side or Bottom

MAXIMUM ALLOWED TORQUE INLET AND OUTLET

- CSA: 280 inch-pounds
- CE: 35 Nm

PILOT GAS CONNECTION

- CSA: 7/16-24 UNS for ¼" or ⅜" tubing
- CE: M10x1 for 4 mm or 6 mm tubing

THERMOCOUPLE/INTERRUPTER BLOCK

11/32-32 UNS, M10x1, M9x1, M8x1

AMBIENT TEMPERATURE RANGE

- Combination control: 32°F to 176°F (0°C to 80°C)
- Latching solenoid valve: 32°F to 176°F (0°C to 80°C)
- Receiver RF without batteries: 176°F (80°C)
- Receiver RF with batteries: 131°F (55°C)

- Receiver infrared with/without batteries: 131°F (55°C)
- Handset: 140°F (60°C)
- Wall switch/Touchpad: 176°F (80°C)
- Switch panel: 221°F (105°C)
- Module: 176°F (80°C)
- Ignition cable: 302°F (150°C)
- Misc. cables: 221°F (105°C)
- Infrared sensor: 176°F (80°C)
- Cable with relay: 158°F (70°C)

HANDSETS

NOTICE
The handsets, receivers, wall switches, switch panels and touchpads are not interchangeable with previous electronics.

RADIO FREQUENCY

- CSA: 315 MHz for U.S. and for Canada.
- For FCC ID:
 - a) User Information acc. to FCC15.21: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For Canada - IC:

Statement acc. RSS Gen Issue 3, Sect. 7.1.3
This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). 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.

- CE: 433.92 MHz for Europe

BATTERIES – HANDSET

- 1 x 9V, new design 2012: 3 x 1.5V „AAA“ (alkaline recommended)

BATTERIES – RECEIVER

- 4 x 1.5V "AA" (alkaline recommended)
- An AC Mains Adapter may be used instead of batteries.

NOTICE
Only the Mertik Maxitrol AC Mains Adapter or one pre-approved by Mertik Maxitrol can be used. Use of other adaptors can render the system inoperable.

V MODULE

- CSA: Inlet: 115VAC/60Hz; 210 VA
Outlet: 115VAC/60Hz; 100 VA
Built-in fuse: 2.5A
- CE: Inlet: 230VAC/50Hz; 210 VA
Outlet: 230VAC/50Hz; 100 VA
Built-in fuse 2,5A

LOCATION

Locate the combination gas valve where it is not exposed to steam cleaning, high humidity, dripping water, corrosive chemicals, dust or grease accumulation, or excessive heat.

- To assure proper operation, follow these guidelines:
 - Locate combination gas valve in a well-ventilated area.

- Mount combination gas valve high enough to avoid exposure to flooding or splashing water.
- Make sure the ambient temperature does not exceed the ambient temperature ratings for each component.

⚠ WARNING

GV60 standard version is suitable for indoor use only.

⚠ WARNING

It is the appliance manufacturer's responsibility to determine GV60's suitability for a specific application.

⚠ WARNING

Do NOT remove screws from the gas valve. Do NOT adjust and/or alter any components marked with tamper indicating paint. Motor knob is not to be removed.

⚠ WARNING

1. Turn off gas supply at the appliance service valve before starting installation, and perform a Gas Leak Test after the installation is complete.
2. Install the sediment trap (where required) in the gas supply line to prevent contamination of the gas valve (see figure 8).
3. 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, do NOT try to repair it. Call a qualified service technician. Force or attempted repair will void warranty and can result in a fire or explosion.

GAS CONNECTIONS

⚠ WARNING

Fire or Explosion Hazard. Can cause property damage, severe injury, or death. Do NOT bend tubing at gas valve connection point after compression fitting has been tightened. This can result in gas leakage at the connection.

⚠ WARNING

Use new, properly reamed pipe free from metal or material chips. When tubing is used, assure that ends are square, deburred and clean. All tubing bends must be smooth and free of distortion.

⚠ WARNING

Do NOT overtighten connections. Overtightening can damage the control body resulting in leakage or control malfunction.

When threads are tightened, the valve must be held at the designated clamping areas (see figure 9). Do NOT apply pressure to top casting or plastic cover.

Connection Main Gas (Tubing connections)

1. Do NOT use pipe joint compound or Teflon®/PTFE tape.
2. Slip nut and ferrule/olive over tubing.
3. Slide nut and ferrule/olive into place, and insert tubing into inlet/outlet connection until it bottoms. Turn finger tight.
4. Use a wrench to tighten nut about 1 turn beyond finger tight.

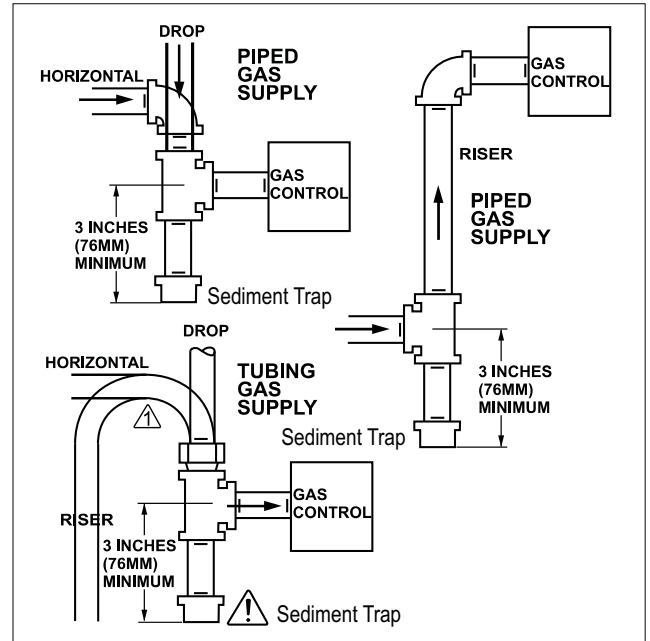


Figure 8: Sediment Trap (where required)

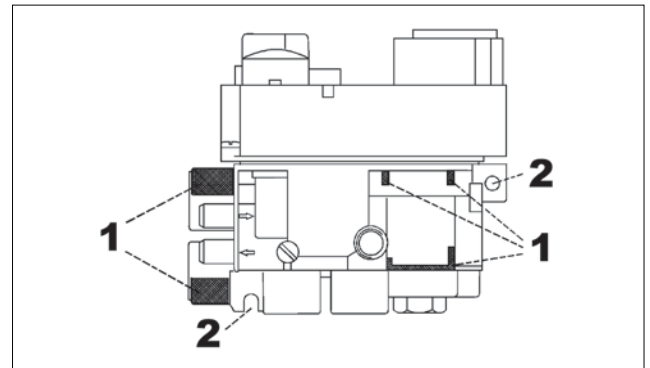


Figure 9: 1 = Clamping Areas, 2 = Mounting Points

Connection Main Gas (Pipe Connections)

1. Do NOT use Teflon®/PTFE tape.
2. Pipe to be inserted into the valve must be the proper thread length and to gauge. Thread that is cut too long can cause distortion or malfunction if inserted too deeply.
3. Apply a moderate amount of approved pipe sealant to the pipe only, leaving the two end threads bare.
4. Connect pipe to valve inlet and outlet.

Connection Pilot Gas (Tubing connections)

1. Do NOT use pipe joint compound or Teflon®/PTFE tape.
2. Slip one-piece fitting (nut with ferrule/olive) over tubing.
3. Insert pilot tubing into pilot outlet until it bottoms. Turn one-piece fitting finger tight.
4. Turn with a wrench until you shear off the ferrule/olive from the nut. Turn an additional ¼ turn to make a gastight seal.
5. Connect other end of tubing to pilot burner.

⚠ WARNING

The main gas valve must be disconnected from the gas supply piping system during any pressure testing of the gas supply piping system at test pressures in excess of ½ psi (3.5 kPa CSA; 50 mbar CE). Overpressurizing can damage the control resulting in leakage or control malfunction.

PERFORM GAS LEAK TEST

1. Check carefully for gas leaks immediately after the valve has been installed and the gas turned on. **Do this before attempting to operate the appliance or other gas burning device.**
2. Use an approved non-corrosive leak detection fluid, or other approved leak detection method, around the diaphragm flanges, pipe connections, seal cap, and all other joints. Bubbles indicate a leak.
3. If no leakage is detected, light the main burner.
4. With the main burner in operation, apply an approved leak test solution to all tubing and pipe connections (including adapters) and the valve inlet and outlet. Bubbles indicate a leak.
5. If a leak is detected, tighten pipe connections (including adapters) according to "GAS CONNECTIONS" (page 6).

▲ WARNING

Absolutely no leakage should occur, otherwise there is a danger of fire or explosion depending upon conditions. Never use if leakage is detected.

WIRING CONNECTIONS

(See figures 10–14, pages 8–12)

NOTICE

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

- Connect all components according to the appropriate wiring diagram.
- When GV60 components are installed, make sure they are not exposed to dirt, oil, grease or other chemical agents.
- Do NOT permit foreign particles under plastic cover.
- Place ON/OFF switch (if equipped) where it is easily accessible for the user.

Thermocouple Circuit

Total resistance of thermocouple circuit should be minimized to ensure proper operation.

NOTICE

The use of the Mertik Maxitrol interrupter block is recommended. Keep connection of interrupter block and thermocouple clean and dry. Avoid severe bending of the thermocouple tubing during installation (min. 1" radius; 2.5 cm) as this may cause it to fail.

- Tighten interrupter block into valve ¼ turn beyond finger tight (2...3 Nm).
- Slide cables into plastic insert.
- Slide plastic insert with cables into the brass interrupter block.
- While keeping pressure on the cables and plastic insert, tighten the thermocouple ¼...½ turn beyond finger tight (2...3 Nm).

Ignition Cable

NOTICE

Do NOT damage the ignition cable while attaching it to the ignition electrode. When the cable is in place, avoid contact with sharp objects or edges. With cables longer than 900 mm, avoid contact with metal parts, as this could decrease spark.

Receiver

NOTICE

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

1. Insert batteries or connect AC mains power. The module for circulating fan and light/dimmer includes a mains adapter. With mains adapter, batteries can be used for backup (RF only).
2. Place ON/OFF switch (if equipped) to **ON** position.
3. The receiver has to learn the handset code: Press and hold the receiver's reset button (figure 10, page 8) until you hear two (2) beeps. After the second, longer beep, release the reset button. Within the subsequent 20 seconds press the ⚡ (small flame) button on the handset until you hear two (2) short beeps confirming the code is set.

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

4. Check the reception. For better reception straighten the antenna (see figure 10, page 8) and move it to a position that allows for better reception (see notice below).
5. 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.

NOTICE

The antenna must not cross or come into contact with the ignition wire. This will render the receiver inoperable.

IR Versions

Place the infrared eye in a suitable position. The infrared signal transmission requires a line of sight.

V Module

- An LED indicates that power is ON.
- Use Power cord, Fan and Light with Molex connector according to wiring diagram (figure 11, page 9) or connect wires with core cable ends to the pluggable screw terminals.
- V Module with screw terminals: max. AWG 12/2,5 mm² (figure 11, page 9).
- Connect the Light and the Fan first and then the power supply.
- Take care that unused outlets are protected from contact.

▲ WARNING

ELECTRIC SHOCK HAZARD

- Read these instructions carefully. Failure to follow them could result in property damage, personal injury, or loss of life.
- This control must be electrically wired and operated in accordance with all codes and local regulations. Service and installation must be performed by a trained, experienced service technician.
- Do NOT use the module if you suspect it may be damaged.

BASIC (RF)

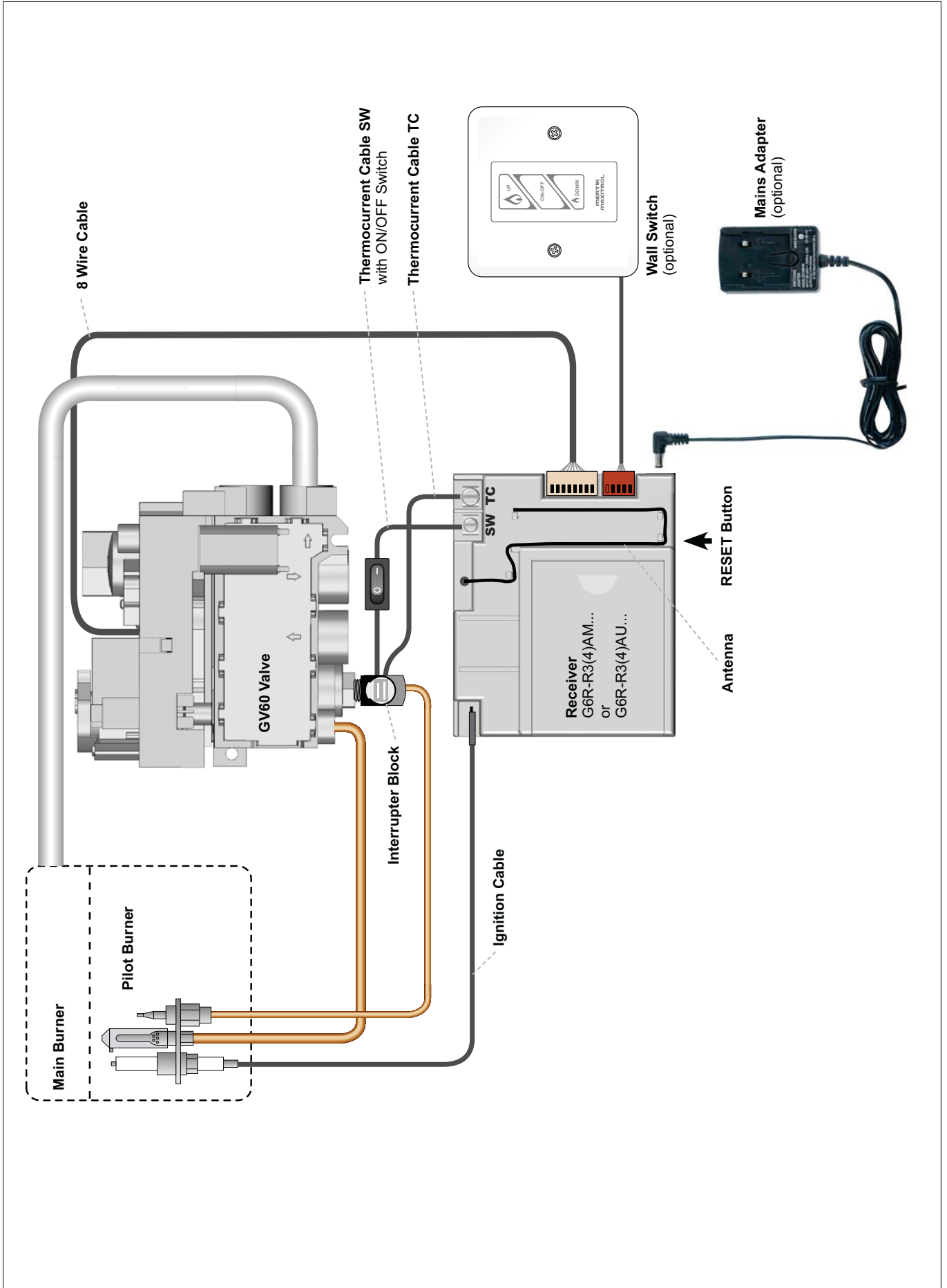


Figure 10

ADDITIONAL FUNCTION RF: FAN – LIGHT/DIMMER – LATCHING SOLENOID

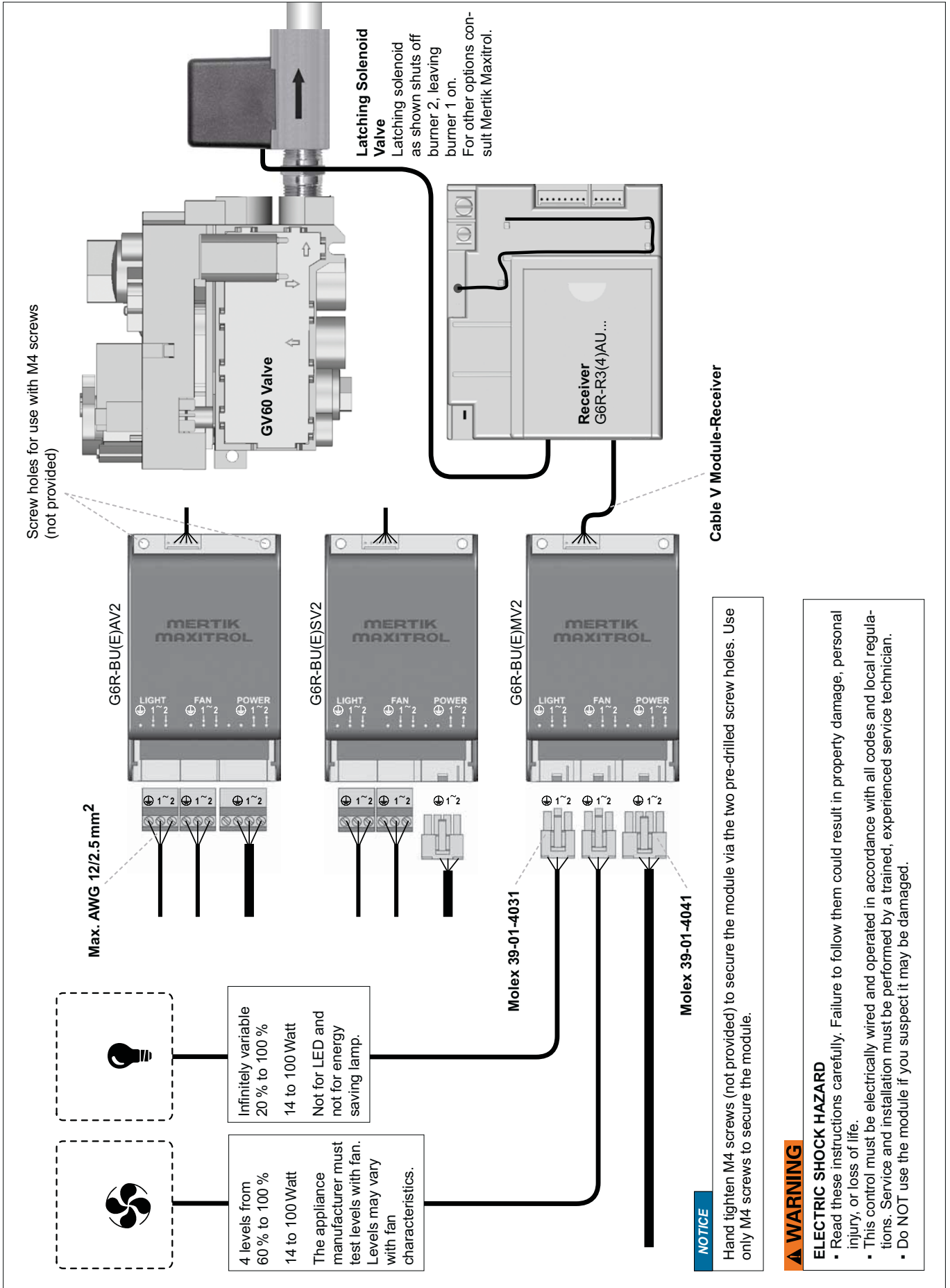


Figure 11

RF 2ND THERMOCOUPLE OPTION (RF)

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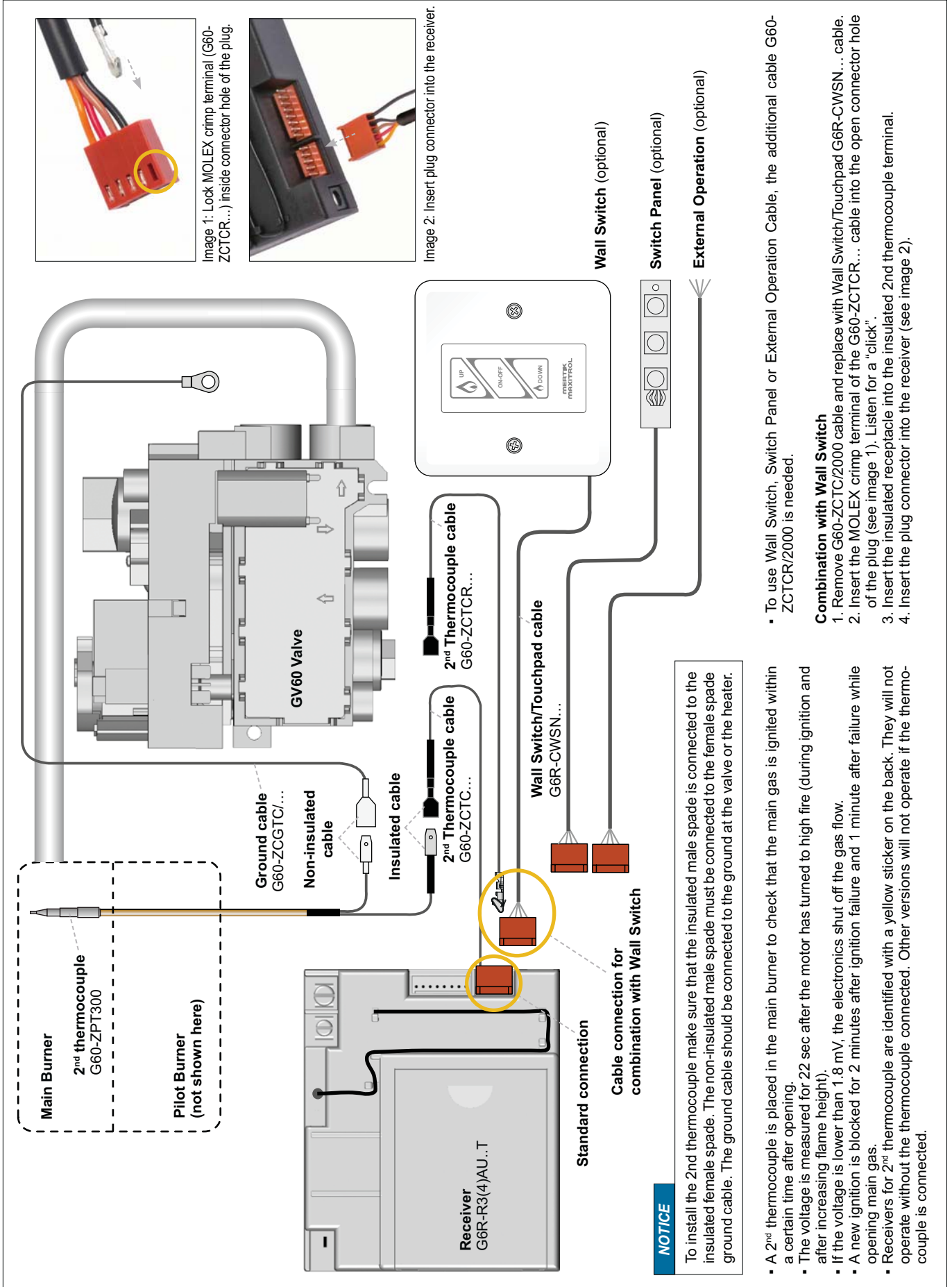
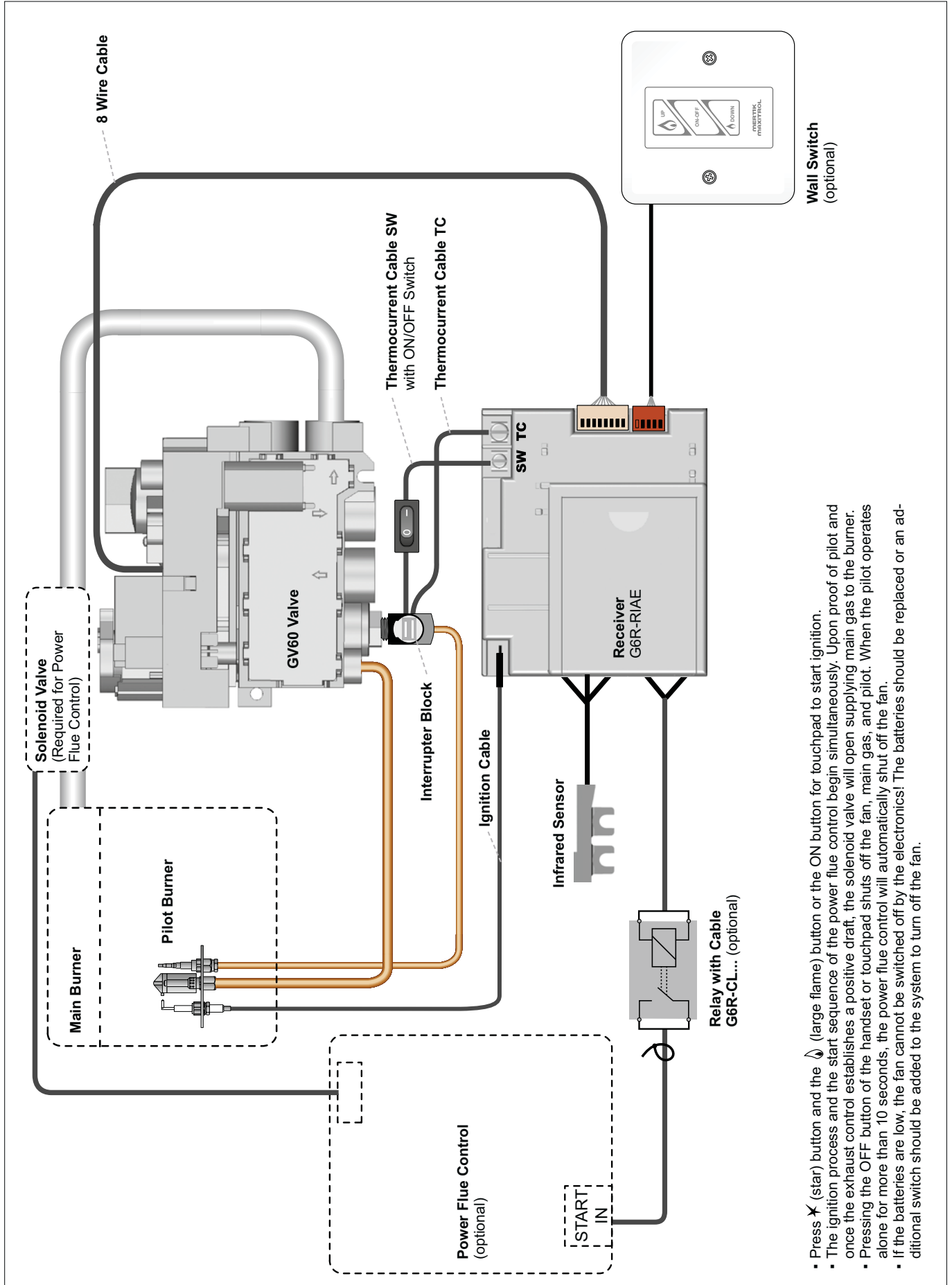


Figure 12

INFRARED (IR)




- Press **★** (star) button and the  (large flame) button or the ON button for touchpad to start ignition.
- The ignition process and the start sequence of the power flue control begin simultaneously. Upon proof of pilot and once the exhaust control establishes a positive draft, the solenoid valve will open supplying main gas to the burner.
- Pressing the OFF button of the handset or touchpad shuts off the fan, main gas, and pilot. When the pilot operates alone for more than 10 seconds, the power flue control will automatically shut off the fan.
- If the batteries are low, the fan cannot be switched off by the electronics! The batteries should be replaced or an additional switch should be added to the system to turn off the fan.

Figure 13

RELAY OPERATION (VOLT FREE CONTACT) (RF, IR)

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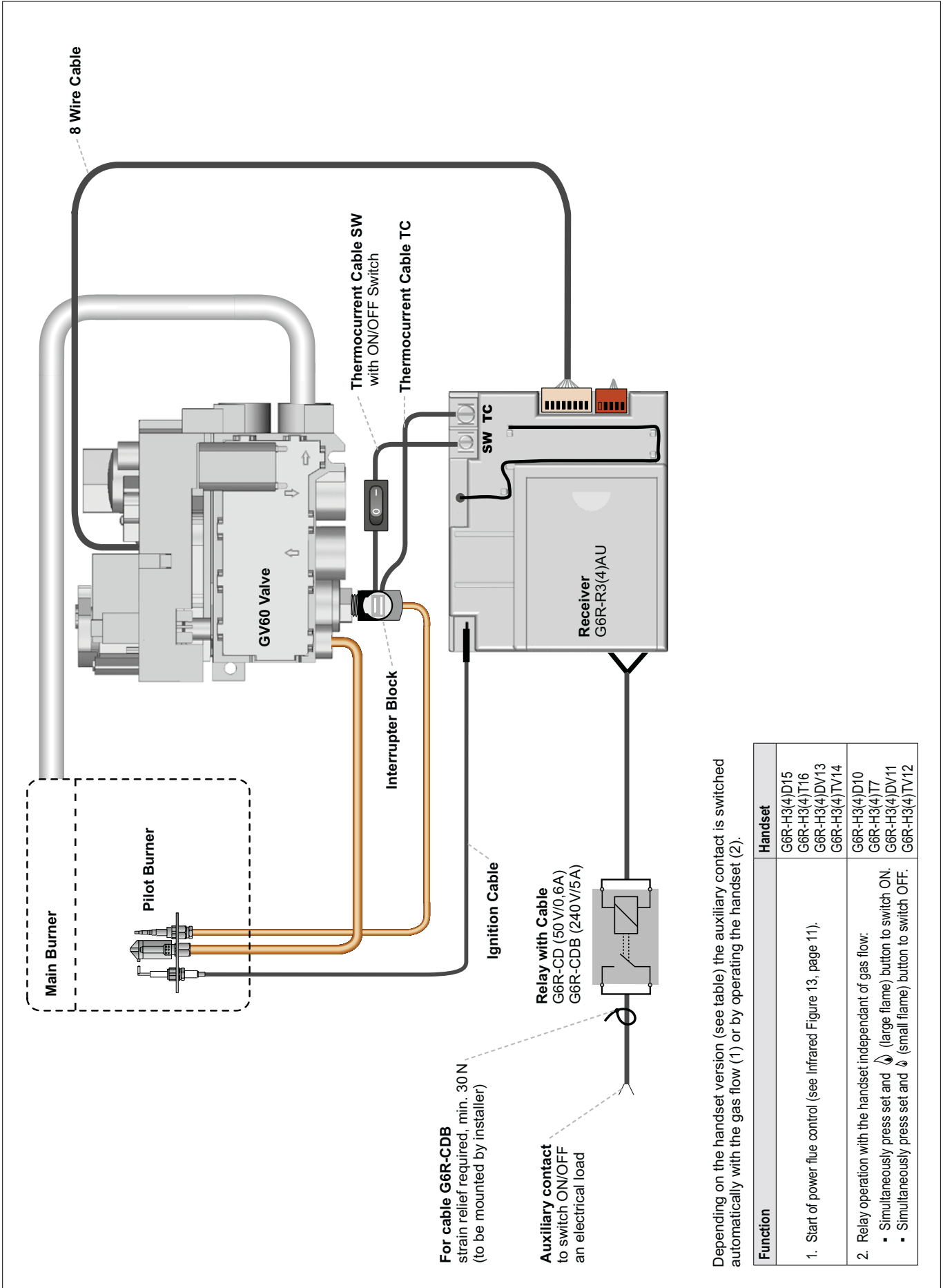


Figure 14

GAS CONTROL KNOB SETTINGS

Gas control knobs function as follows (see figure 15):

KNOB	POSITION	FUNCTION
Main valve	OFF	Prevents main gas flow through valve.
Main valve	ON	Permits main gas flow through valve if the pilot is lit and thermocouple is generating sufficient power.
MANUAL knob	MAN	Allows the pilot to be manually ignited and prevents main gas flow.
MANUAL knob	ON	Allows for automatic ignition.

ADJUSTMENT

⚠ WARNING

It is the appliance manufacturer's responsibility to determine GV60's suitability for a specific application.

⚠ WARNING

Do NOT attempt to remove screws from the top of gas valve. Do NOT change any adjustments marked with tamper indicating paint. Motor knob is not to be removed.

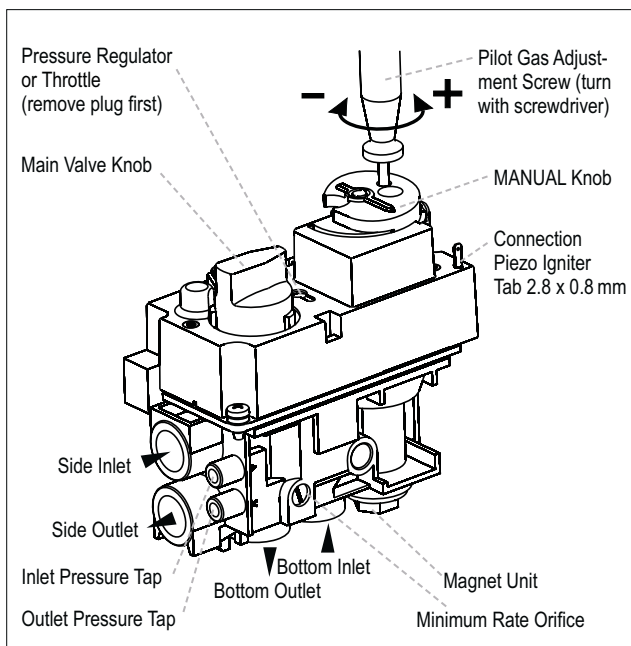


Figure 15: GV60, Connections and Adjustment Options

Pilot Flame Adjustment

(Vented Units Only)

The pilot flow adjustment is preset to maximum at the factory. The pilot flame should envelope $\frac{3}{8}$ " to $\frac{1}{2}$ " of the thermocouple – vented only (see figure 16).

1. The adjustment screw can be reached through a hole in the MANUAL knob (see figure 15).
2. Turn the MANUAL knob to the **ON** position.
3. It is now possible to pierce through a film on the cover with a screwdriver to reach the adjustment screw beneath.
4. Turn the adjustment screw clockwise ↻ to decrease or counter-clockwise ↻ to increase pilot flame.

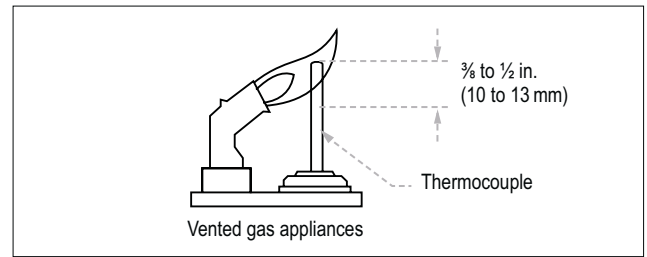


Figure 16: Proper Flame Impingement on Thermocouple

Outlet Pressure Adjustment

(Vented Units Only)

STANDARD REGULATOR OR THROTTLE

(Throttle CE only)

1. Connect a pressure manometer to the valve outlet pressure tap. Pressure tap is opened by turning the screw counter-clockwise ↻. Pressure regulator or throttle are located under the cover and can be reached by removing the plug (see figures 15 and 17).
2. Turn MANUAL knob and main valve knob to the **ON** position.
3. Turn pressure regulator adjustment screw to set required burner pressure (high fire). Pressure is increased by turning clockwise ↻ (pressure regulator models), or decreased by turning counter-clockwise ↻.

NOTE: Throttle model's pressure is increased by turning counter-clockwise ↻; or decreased by turning clockwise ↻.

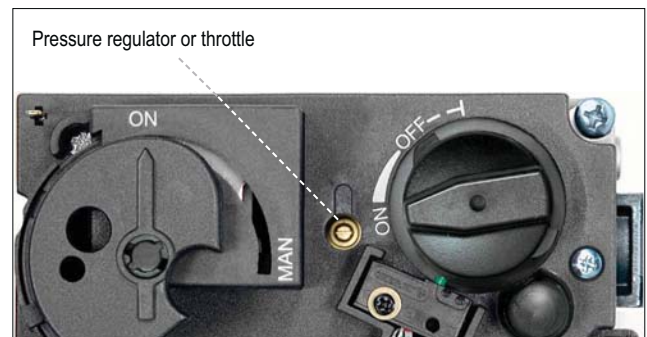


Figure 17: Combination Control GV60, Cover

4. After adjustment, replace the plug.
5. If no other adjustments are required, close pressure tap(s) by turning the screw(s) full clockwise ↻. Check all connections/pressure tap(s) for leaks.
6. If the desired outlet pressure or flow cannot be achieved by adjusting the gas valve, check the gas valve inlet pressure using a manometer at the valve inlet pressure tap. If the inlet pressure is in the normal range, replace the gas valve; otherwise, take necessary steps to assure proper gas pressure to the valve.

CONVERTIBLE PRESSURE REGULATOR

(optional)

Convertible regulators are designed to deliver either of two fixed outlet pressures for Natural Gas (NG) or LP Gas. To change from one gas to the other, turn the conversion plug (see figure 18, page 14) counter-clockwise ↻ to remove. Unsnap and remove the plastic part, rotate it 180°, and then slide it back on the conversion plug until it snaps.

Reinstate the conversion plug by screwing it clockwise until it bottoms out.

NOTE: Do NOT adjust and/or alter any components marked with tamper indicating paint.

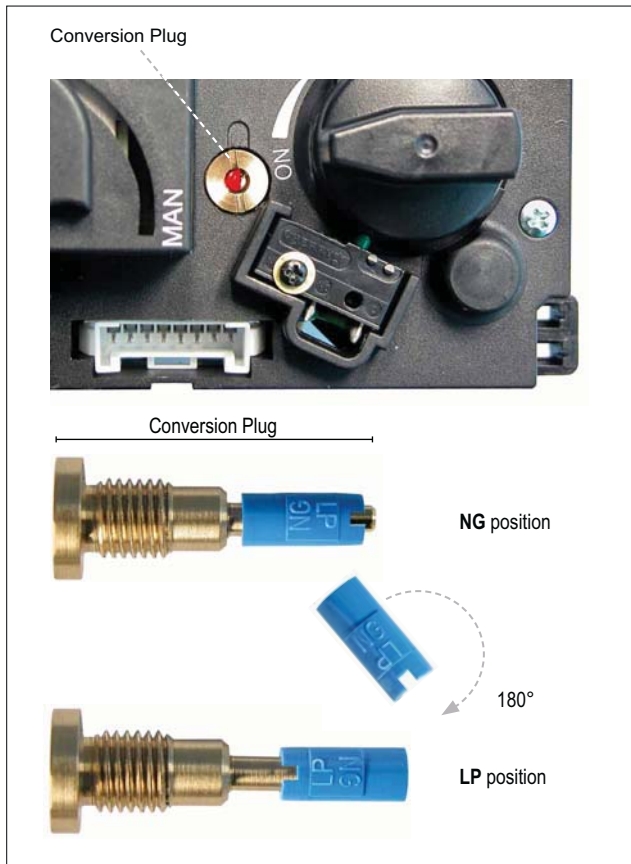


Figure 18: Conversion from one gas to another

Minimum Gas Flow Adjustment (Vented Units Only)

1. Set the control into low fire setting by turning the motor knob to **OFF** position and back until the valve opens.
2. The minimum rate can be set either by screwing in a calibrated minimum rate screw (fixed orifice) or an adjustable minimum rate screw. Controls with adjustable screws without a customer specific setting are factory set at maximum flow.
3. Turn the screw clockwise ↻ to decrease the minimum flow.
4. Care should be taken to screw the fixed orifice until it stops.
5. Close pressure tap(s) by turning the screw(s) full clockwise ↻. Check all connections/pressure tap(s) for leaks.

Changing the Fuel Type (Vented Units Only)

GV60 is suitable for all gas types and can be converted to meet the manufacturer's requirements for a specific gas type. Adjustments of pressure regulator, minimum rate and pilot gas are according to above-mentioned instructions. To convert for LPG CE it is necessary to block the pressure regulator by turning the regulator adjustment screw fully to the bottom limit (or the throttle adjustment screw fully to the upper limit).

FINAL CHECK

Observe several complete cycles to ensure proper operation. During these cycles the electronics will determine the optimum ignition sequence timing.

1. **STOP!** Read the safety information included before proceeding.
2. Turn main valve knob to the **OFF**, full clockwise ↻ position.
3. Place ON/OFF switch (if equipped) to the **O** (OFF position).
4. 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 "WHAT TO DO IF YOU SMELL GAS" in the safety information (page 3).** If no gas is present, proceed according to the Mertik Maxitrol Operating Instructions.

⚠ WARNING

FIRE OR EXPLOSION HAZARD. Attempted disassembly or repair can cause property damage, severe injury or death. Do NOT disassemble the gas valve; it contains no serviceable components.

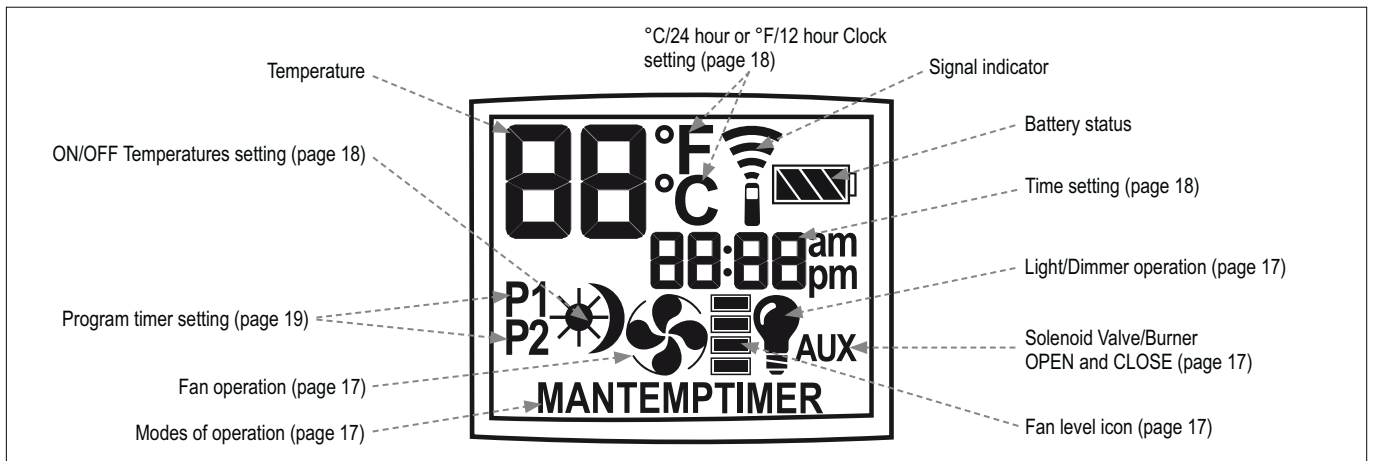


Figure 19

GENERAL NOTES

Radio Frequency Handset

433.92 MHz for Europe; 315 MHz for U.S. and for Canada. 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.



Figure 20: Previous Handset

NOTICE

Replacement handsets for CSA models also must have the same part number (see label).

NOTICE

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

Batteries – Handset

- 1 x 9V (alkaline recommended).
- Low battery indicator on handsets with display.
- Handsets without display: the red LED gets darker.
- Battery replacement is recommended after 2 years.

Batteries – Receiver

- 4 x 1.5V "AA" (alkaline recommended).
- Low battery indication: frequent beeps for 3 seconds when motor turns.
- An AC Mains Adapter may be used instead of batteries.
- The module for fan speed control and light/dimmer includes mains power together with batteries in the receiver for automatic backup in case of power outage.
- Without using a mains adapter, battery replacement is recommended at the beginning of each heating season.

NOTICE

Only the Mertik Maxitrol AC Mains Adapter or one pre-approved by Mertik Maxitrol can be used. Use of other adaptors can render the system inoperable.

NOTICE

The handsets, receivers, wall switches, switch panels and touchpads are not interchangeable with previous electronics (see figure 21).

SETTING THE ELECTRONICS CODE

(First time use only.)

Radio Frequency Handset

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 21) until you hear two (2) beeps. The first beep is short and the second beep is long. After the second beep, release the reset button.
- Within the subsequent 20 seconds press the δ (small flame) button on the handset until you hear two additional short beeps confirming the code is set. If you hear one long beep, this indicates the code learning sequence has failed or the wiring is incorrect.

NOTE: This is a one time setting only, and is not required after changing the batteries of the handset or receiver.

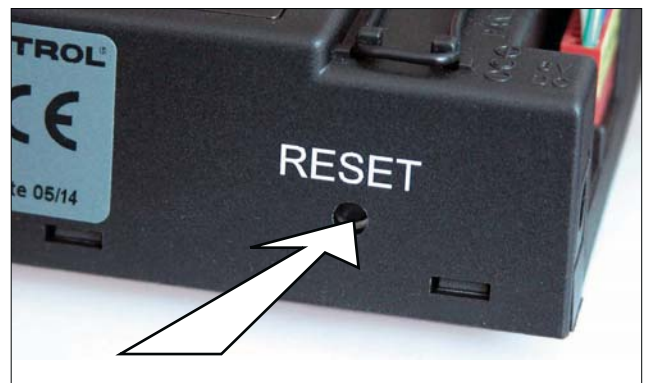


Figure 21: Receiver Reset Button

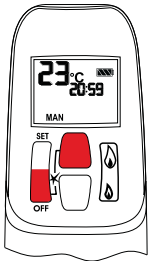
TO TURN ON APPLIANCE

⚠ WARNING

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

- Turn MANUAL knob on valve to the **ON**, full counter-clockwise ↺ position (see figure 24, page 20).
- Place ON/OFF switch (if equipped) in **I** (ON position).

Handset



- Simultaneously press the OFF and 🔥 (large flame) buttons until a short beep confirms the start sequence has begun; release buttons.
- Continuing beeps confirm the ignition is in process.
- Once pilot ignition is confirmed, there is main gas flow.
- After main burner ignition the handset will automatically go into manual mode (CSA version, CE version).

Wall Switch/Touchpad/Switch Panel

- Press button "B" (see figure 22) until a short beep confirms the start sequence has begun; release button.
- Continuing beeps confirm the ignition is in process.
- Once pilot ignition is confirmed, there is main gas flow.

⚠ WARNING

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" (page 20).

STANDBY MODE (Pilot Flame)

Handset

- Press and hold 🔥 (small flame) to set appliance at pilot flame.

Wall Switch/Touchpad/Switch Panel

- Press and hold button "C" (see figure 22) to set appliance at pilot flame.

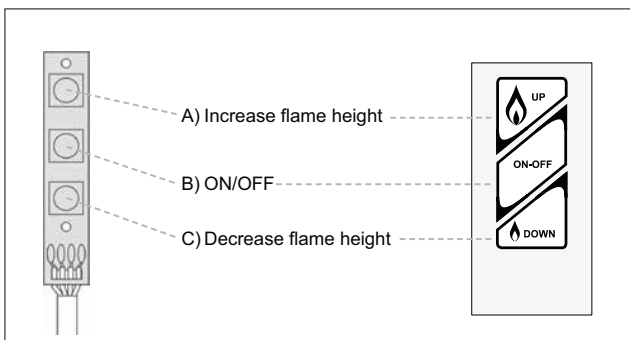
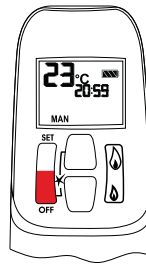


Figure 22: Switch Panel and Wall Switch/Touchpad

TO TURN OFF APPLIANCE



Handset

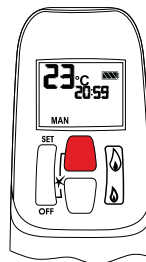
- Press **OFF** button.

Wall Switch/Touchpad/Switch Panel

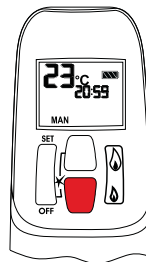
- Press button "B" (see figure 22).

FLAME HEIGHT ADJUSTMENT

Handset



- In standby mode: Press and hold 🔥 (large flame) button to increase flame height.

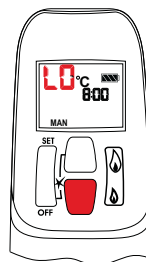


- Press and hold 🔥 (small flame) button to decrease flame height or to set appliance at pilot flame.
- For fine adjustment tap the 🔥 (large flame) or 🔥 (small flame) buttons.

Wall Switch/Touchpad/Switch Panel (see figure 22)

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

Designated Low Fire and High Fire



- Double-click 🔥 (small flame) button. "LO" will be displayed.

NOTE: Flame goes to high fire first before going to designated low fire.



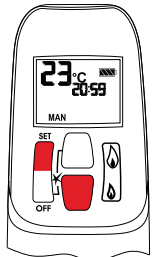
- Double-click 🔥 (large flame) button. Flame automatically goes to high fire. "HI" will be displayed.

⚠ WARNING

If the appliance will not operate, follow the instructions "TURN OFF GAS TO APPLIANCE" (page 20).

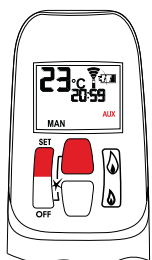
TO OPEN AND CLOSE SOLENOID VALVE/BURNER

NOTE: 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 to the ON position when the GV60 is switched OFF remotely.



Burner OFF

- Upon ignition Main Burner and Decorative Burner are ON.
- Simultaneously press **SET** and (small flame) buttons to switch the Burner OFF. Printed instructions are on the battery cover (see figure 23).
- Simultaneously press **SET** and (large flame) buttons to switch Burner ON. (The **AUX** symbol on the display indicates the solenoid valve is OPEN.)



Burner ON

NOTE: The operation of the AUX is blocked in timer OFF mode, when the setting of the Nighttime Setback Temperature is “--”.



Figure 23: Instructions for Latching Solenoid Valve (on battery cover)

LIGHT/DIMMER OPERATION

Light/Dimmer



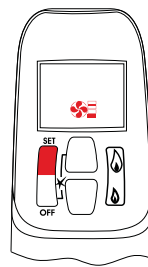
- Briefly press SET button to scroll to (light bulb) mode. Light bulb icon flashes.
- Press and hold (large flame) button to turn ON the light or increase brightness.
- Press and hold (small flame) button to decrease brightness.
- In the Light/Dimmer mode, the OFF button shuts OFF the light.
- If you want the light ON but no flame, press and hold the (small flame) button and turn to Pilot flame.

NOTE: The light bulb icon is displayed during light/dimmer setting only. 8 seconds after the light/dimmer has been set, the handset will automatically go into temperature control mode (CSA version) or manual mode (CE version).

CIRCULATING FAN OPERATION

Circulating Fan

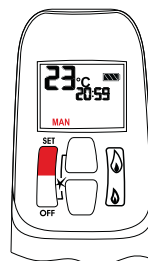
The circulating fan has 4 speed levels from low (1 bar) to high (4 bars).



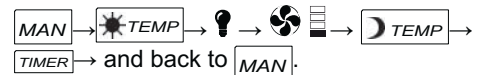
- Briefly press SET button to scroll to (fan) mode. Fan and Level icons flash.
- Press (large flame) button to switch ON and increase fan speed.
- Press (small flame) button to decrease fan speed.
- To turn OFF fan, press (small flame) button until all 4 speed level bars disappear.

NOTE: 8 seconds after the fan has been set, the handset will automatically go into temperature control mode (CSA version) or manual mode (CE version). The fan starts 4 minutes after the gas opens (from OFF or from pilot) at maximum speed and goes to the displayed level after 10 seconds. The fan stops 10 minutes after the gas is OFF or at pilot.

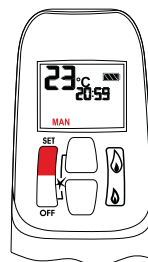
MODES OF OPERATION



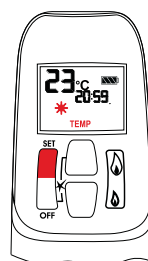
- Briefly pressing the SET button changes the mode of operation in the following order:



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

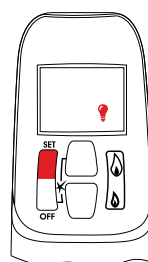


- **MAN Manual Mode**
Manual flame height adjustment.

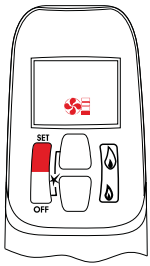


- **TEMP Daytime Temperature Mode**
(Appliance must be in standby mode; pilot ignited)

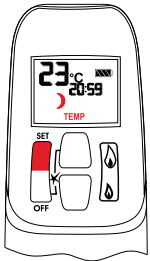
The room temperature is measured and compared to the set temperature. The flame height is then automatically adjusted to achieve the Daytime Set Temperature.



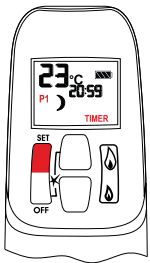
- **Light/Dimmer Setting Mode**
Turns light/dimmer ON and OFF and adjusts brightness.



- **Circulating Fan Setting Mode**
Turns circulating fan ON and OFF and adjusts fan speed.



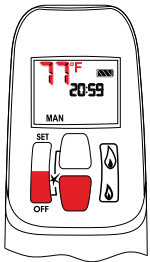
- **Nighttime Setback Temperature Mode**
(Appliance must be in standby mode; pilot ignited)
The room temperature is measured and compared to the Nighttime Setback Temperature. The flame height is then automatically adjusted to achieve the Nighttime Setback Temperature.



- **Timer Mode**
(Appliance must be in standby mode; pilot ignited)
The Timers P1 and P2 (Program 1, Program 2) each can be programmed to go ON and OFF at specific times. For instructions see Timer Programming Mode.

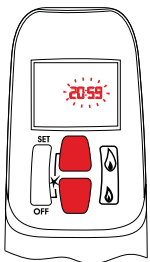
NOTE: The display shows the set temperature every 30 seconds.

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



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

SETTING THE TIME

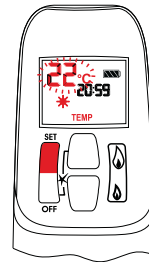


- The Time display will flash after either:
a) Installing the battery or
b) Simultaneously pressing the (large flame) and (small flame) buttons.
- Press (large flame) button to set the hour.
- Press (small flame) button to set the minute.
- Press **OFF** or simply wait to return to manual mode.

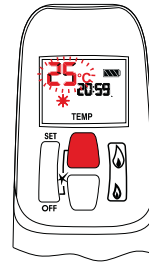
SETTING THE ON/OFF TEMPERATURES

Setting the “DAYTIME” Temperature

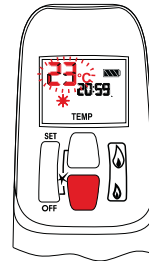
DEFAULT SETTINGS: TEMP (sun), 23 °C/74 °F



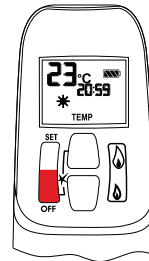
- Briefly press **SET** button to scroll to TEMP TEMP (sun) mode. Hold the **SET** button until the TEMP flashes.



- Press (large flame) button to increase Daytime Set Temperature.



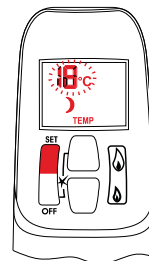
- Press (small flame) button to decrease Daytime Set Temperature.



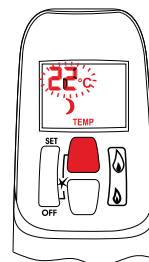
- Press **OFF** or simply wait to complete programming.

Setting the “NIGHTTIME SETBACK” Temperature

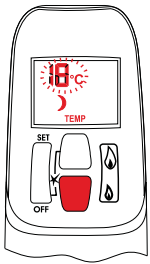
DEFAULT SETTINGS: TEMP (moon), “--” (OFF)




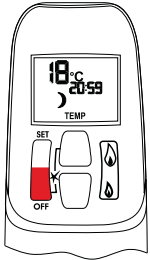
- Briefly press **SET** button to scroll to TEMP TEMP (moon) mode. Hold the **SET** button until the Temperature flashes.



- Press (large flame) button to increase Nighttime Setback Temperature.











- Press  (small flame) button to decrease Nighttime Setback Temperature.
















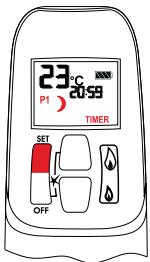
- Press OFF or simply wait to complete programming.

SETTING PROGRAM TIMERS

Default Settings

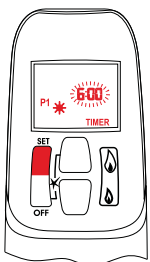
CE:	Program 1:	P1 	: 6:00	P1 	: 8:00
	Program 2:	P2 	: 23:50	P2 	: 23:50
CSA:	Program 1:	P1 	: 6:00 ^{am}	P1 	: 8:00 ^{am}
	Program 2:	P2 	: 11:50 ^{pm}	P2 	: 11:50 ^{pm}


- 2 ON times can be programmed  per day.
- CE: The day starts at 0:00, ends at 23:50.
- CSA: The day starts at 12:00^{am}, ends at 11:50^{pm}.
- The ON/OFF times have to be programmed in the order P1  ≤ P1  < P2  ≤ P2 .
- If P1  = P1  or P2  = P2  the timer is deactivated.
- To have the fire over night, it can be set:
 CE: P2  23:50 and P1  0:00
 CSA: P2  11:50^{am} and P1  12:00^{am}

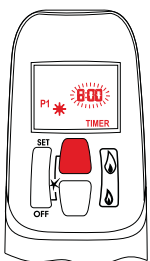



- Select Timer Mode by briefly pressing the SET button.

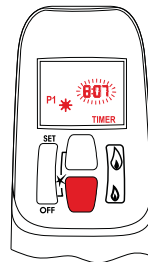
Setting P1 ON Time




- Hold the SET button until P1 and  (sun) are displayed and the time flashes.

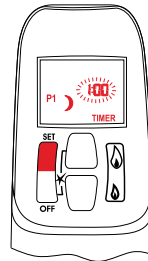


- Set the hour by pressing the  (large flame) button.

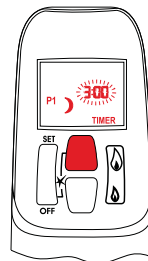



- Set the minutes by pressing the  (small flame) button.

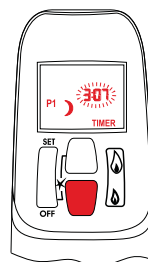
Setting P1 OFF Time




- Briefly press SET button to scroll to setting P1 OFF time. P1 and  (moon) are displayed and the time flashes.




- Set the hour by pressing the  (large flame) button.




- Set the minutes by pressing the  (small flame) button.

Setting P2 ON Time

- Briefly press SET button to scroll to setting P2 ON time. P2  (sun) is displayed and the time flashes.
- See instructions "Setting P1 ON Time".

Setting P2 OFF Time

- Briefly press SET button to scroll to setting P2 OFF time. P2  (moon) is displayed and the time flashes.
- See instructions "Setting P1 OFF Time".
- This concludes programming Timers P1 and P2. Press OFF or wait. The handset will automatically save your changes.

MANUAL OPERATION

(Only possible, when MANUAL knob is used)

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 "WHAT TO DO IF YOU SMELL GAS" in the safety information on page 2.** 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 ignitor (optional) are accessible.
8. Fully push down manual pilot valve operator and hold in, to start pilot gas flow (see figure 24).

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 IGNITOR:

Change the ignition cable from the receiver to the valve (see figure 24). Push in the piezo ignitor to ignite. If pilot does not stay lit, wait five (5) minutes and repeat.

⚠ WARNING

If the pilot does not stay lit after several tries, turn the main valve knob to **OFF** and proceed to step 12.

9. If applicable, replace pilot access panel before proceeding.
10. Turn MANUAL knob to the **ON**, full counter-clockwise ↻ position.
11. Turn main valve knob to the full **ON**, full counter-clockwise ↻ position.
12. If the appliance will not operate, follow the instructions "TURN OFF GAS TO APPLIANCE".

TO TURN OFF GAS TO APPLIANCE

1. Place ON/OFF switch (if equipped) in **O** (OFF position).
2. If gas control is accessible turn main valve knob to the **OFF** full clockwise ↻ position.

AUTOMATIC TURN DOWN

6 Hour no Motor Movement

(CSA version)

- Manual Mode/Temperature/Timer Mode: The valve will turn to pilot flame if there is no change in flame height for a 6 hour period. In Temperature/Timer Mode if the ambient room temperature changes, the flame height will adjust automatically to maintain set temperature, and the fire will continue to function normally. The valve will turn to pilot flame if the set temperature and the ambient room temperature remain the same over a 6 hour period.

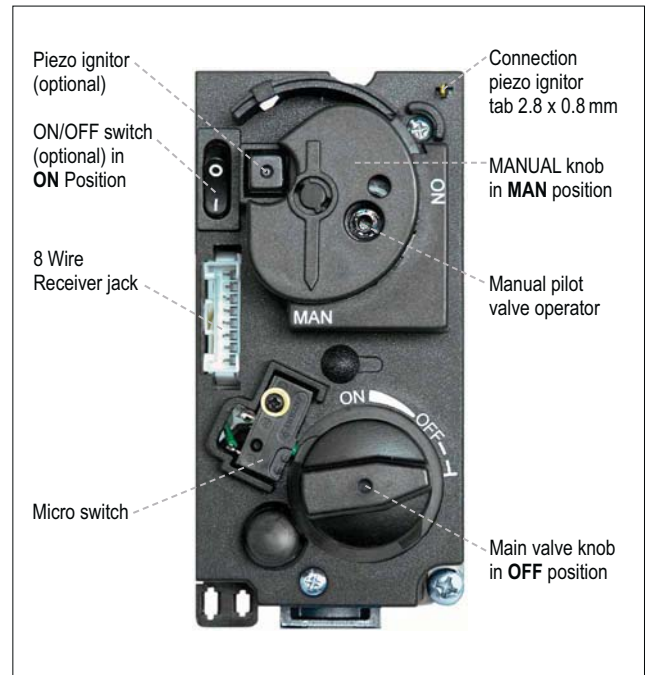


Figure 24: Combination control, cover

Receiver Overheating

(only if module is connected)

- Valve turns to pilot flame if the temperature in the receiver is higher than 140 °F (60 °C). The main burner comes back on only when the temperature is below 140 °F (60 °C).

1 Hour Turn Down for Special Receiver

(bedroom fireplaces only)

- The valve will turn to pilot flame if there is no change in flame height over a 1 hour period.

AUTOMATIC SHUT OFF

Low Battery Receiver

- With low battery power in the receiver the system shuts off the fire completely. This will not happen if the power supply is interrupted.

Five Day Shut Off

(CSA version)

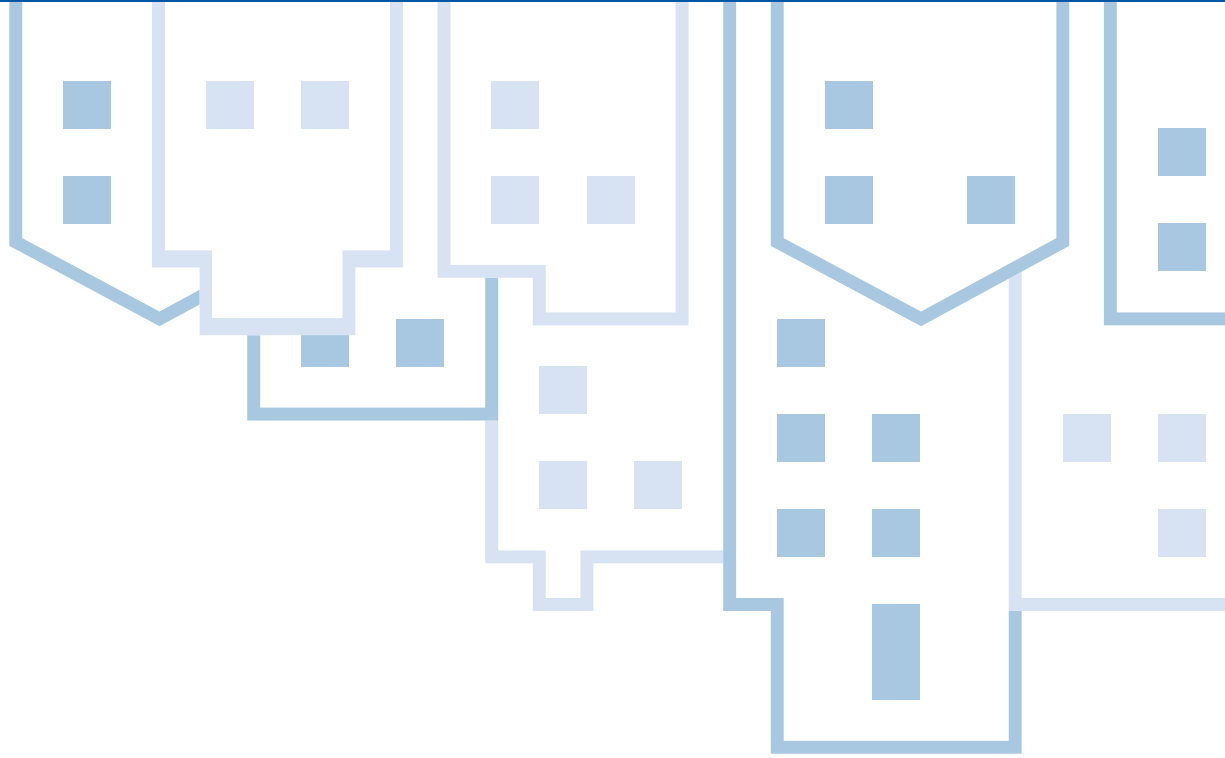
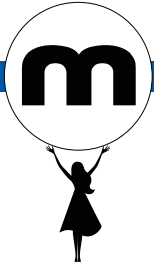
- The system shuts off the fire completely if there is no change in flame height for 5 days.

Second Thermocouple Shut Off

(optional)

- The system shuts off the fire if the main burner does not completely ignite approximately 20 seconds after ignition or after pushing the 🔥 (large flame) button.

NOTE: Before the next ignition there is a 2 minute waiting period. If the thermocouple is still too hot, then you will hear a long beep.



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