# "EI" CONTROL PARTS LIST

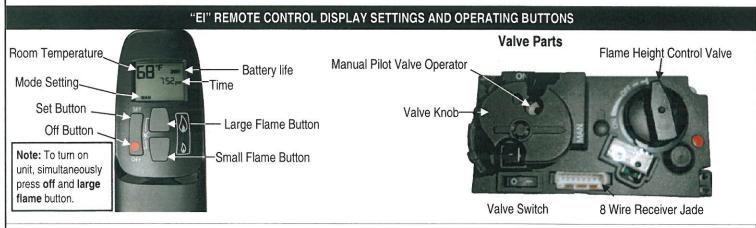
- GV60 Electronic Ignition Gas Valve (GV60-VNG(Natural gas) (GV60-VLP(Propane)
- Remote / Transmitter "Thermostat, Timer, Variable Height Control (GV60-TXA)
- Module / Receiver(GV60-RXA) 3.
- 4. Thermocouple Interrupter (GV60-TIA)
- Ignition Cable (GV60-ICA)

- Interrupter Receiver Cable (GV60-RCA)
- On / Off Switch with Cable (GV60-SWA)
- 8 Wire Cable (GV60-C8)
- Battery Box Cable (GV60-BCA)
- Valve Vanisher

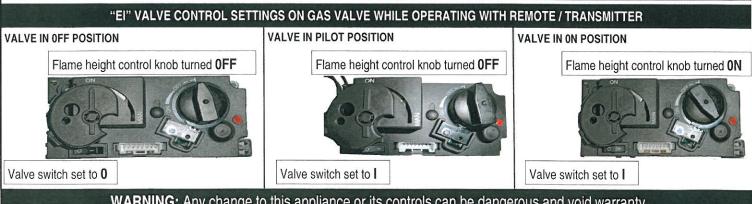


Application: GV60 is a battery-powered electronic remote ignition and control system for gas appliances with pilot system. DO NOT connect to 115 volt line. Safety controls damaged by overheating (not following instruction manual) or 115 volt electricity are not covered by warranty.

Warnings: GV60 standard version is suitable for indoor use. 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.

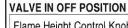


We recommend that you familiarize yourself with the control valve layout and operation prior to installation.



**WARNING:** Any change to this appliance or its controls can be dangerous and void warranty

# "EI" VALVE CONTROL SETTINGS ON GAS VALVE FOR MANUAL OPERATION



Flame Height Control Knob turned 0FF



Valve switch set to 0

#### **VALVE IN PILOT POSITION**

Valve switch set to I

Flame Height Control Knob turned **0FF** 



VALVE IN ON POSITION

Flame Height Control Knob turned 0N



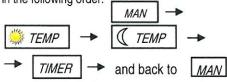
Valve switch set to I

Warning: Use only your hand to push in or turn the gas control knobs and switch. Never use tools.

# **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 (large flame) or the small (small flame) button.

- MAN — Manual Mode - Manual Flame Height Adjustment.



\* Daytime Temperature Mode

(Appliance must be in stand by 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.



• TEMP — 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 — Timer Mode

**Temperature 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



# 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: Installing the battery or Simultaneously pressing the large flame) and (small flame) button.
- 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 AND "DAYTIME" TEMPERATURE



#### DEFAULT SETTINGS:

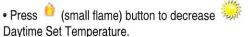


TEMP (sun). 23°C/74°F

 Briefly press SET button to scroll to (SUN) mode. Hold the SET button until the TEMP flashes.



(large flame) button to increase Daytime Set Temperature.



Press OFF or simply wait to complete programming

#### SETTING THE "NIGHTTIME SETBACK" TEMPERATURE



Briefly press SET button to scroll to

(moon) mode. Hold the SET button until the TEMP flashes.

(large flame) button to increase Nighttime Setback Temperature.

 Press (small flame) button to decrease ( Nighttime Set back Temperature.

Press OFF or simply wait to complete programming

TEMP (moon), "--" (OFF)

### **SETTING PROGRAM TIMERS**



**DEFAULT SET-**

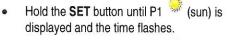
Program 1 (P1): 6:00am P1 (8:00am

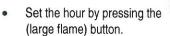
Program 2 (P2): \$\iint 4:00pm \quad P2 \bigceq 10:00pm

 Select Timer Mode by briefly pressing the SET button



## **SETTINGS P1 ON TIME**





Set the minute by pressing the (small flame) button.



## **SETTINGS P1 OFF TIME**

- Briefly press **SET** button to scroll to setting P1 OFF time. P1 (( (moon) is displayed and the
- Set the hour by pressing the (large flame)
- Set the minutes by pressing the (small flame)

## **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. The handset will automatically save your changes.

## **6 HOUR NO COMMUNICATION FUNCTION**

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.

# LIGHTING AND OPERATION WITH REMOTE / TRANSMITTER

#### FLAME HEIGHT ADJUSTMENT USING REMOTE / TRANSMITTER

(Picture of transmitter with manual mode display on screen)

- In standby mode: Press and hold <sup>6</sup> (large flame) button to increase flame height
- Press and hold (small flame) button to decrease flame height or to keep the pilot lit.
- When relighting the burner, press and hold the large flame button until flame height control knob reaches 5pm position.
- For fine adjustment tap (large flame) of (small flame) buttons.



Large Flame Button

Small flame Button

#### **Designated Low and High Fire**

(1 Picture of each transmitter with Low and On display on screen)

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

**NOTE:** Flame automatically goes to designated low fire.

Double-click (large flame) button, "HI" will be displayed.

NOTE: Flame automatically goes to designated high fire.





Note: If the pilot flame shuts off, press the off button on the remote / transmitter and wait 5 minutes before relighting.

# LIGHTING INSTRUCTION FOR MANUAL CONTROL

Note: When turning flame control 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.

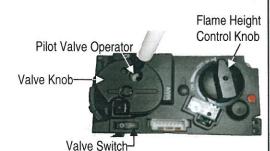
- 1. Stop! Read the safety information included before proceeding.
- 2. Turn Flame Height Control knob to the "OFF," full clockwise position.
- 3. Turn MANUAL knob to the "MAN," full clockwise position.
- 4. Place ON/OFF switch in "O" (OFF position).
- 5. Wait five (5) minutes for the gas to dissipate.

If you detect gas STOP! Check for with soap and water not with open flame.

- 6. Place ON/OFF switch in I (ON position) (See Valve Picture).
- 7. With the valve knob in MAN position a manual pilot valve operator.
- 8. Fully push down on manual pilot valve operator and hold in, to start pilot gas flow.
- 9. Light pilot with a match or lighter.
- 10. Once pilot is lit, continue to depress pilot valve operator and hold until the pilot flame remains lit (approximately 30 to 60 seconds).

Note: If pilot does not remain lit, depress and wait at least 5 minutes to allow gas to dissipate (Then repeat 9 & 10).

- 11. Turn valve knob to the "ON", full counterclockwise.
- 12. Turn Flame control knob to the **FULL ON**, full counterclockwise position (5pm position) (See pg. 2: Manual Operation)
- 13. To turn off burner and allow pilot to remain lit, turn valve knob clockwise to "MAN" position.



Electrode Pilot barrel Air Intake hole Thermocouple (Clean Annually) Pilot Assembly

Blue Dot Natural gas; Red Dot Propane

IMPORTANT SERVICE TIP! Obstructed Pilot Air Intake Ports result in an improper gas/air mixture and a weak pilot flame. Weak pilot flame is the NUMBER 1 SERVICE ISSUE REGARDING NUISANCE SHUT-OFF. Using canned compressed air, blow out the opposing air intake ports located at the base of the pilot. (where the gas supply line attaches to the pilot)

> KEEP BURNER AREA CLEAN AND PERFORM 3 AIR INTAKE PORTS **CLEANING ANNUALLY**

**IMPORTANT!** 

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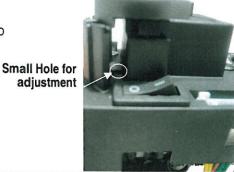
## PILOT ADJUSTMENT AND IMPORTANT INSTALLATION INSTRUCTIONS

<u>PILOT FLAME ADJUSTMENT:</u> If adjustment is necessary, use a <u>narrow long stem screw driver</u> to turn pilot adjustment screw. To adjust turn clockwise for less pilot flame, counterclockwise for more pilot flame.

- 1. The adjustment screw can be reached through the small hole in the VALVE knob.
- 2. Turn the VALVE knob to the **ON** position.
- 3. It is now possible to reach the adjustment screw beneath.

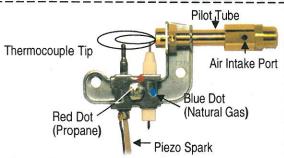
Note: Pilot flame should be approximately 2" in length.

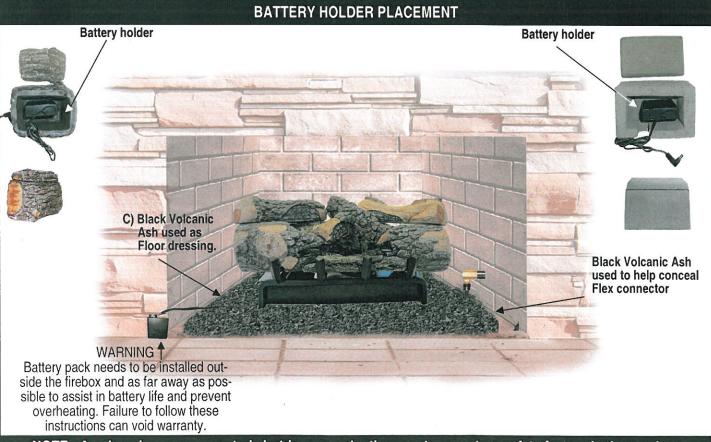




Important: For all valves, the air must dissipate and allow gas flow to pilot line before the ODS pilot will light properly.

The pilot flame should be steady and soft blue surrounding 1/8 inch of the thermocouple.





<u>NOTE:</u> Any beeping or unexpected shutdown may be the over-temperature safety feature in the receiver or battery holder. If this happens, move the receiver into a cooler area, and/or use the RH2/RH3 remote house.

TROUBLE SHOOTING GUIDE				
OBSERVED PROBLEM	POSSBILE CAUSE	REMEDY		
Electronics do not work. (Motor does not turn, no beeping, or no sparks).	The receiver is in a metal box or metal heat shield, this box is seperated from the valve, and is not connected by a secure ground.	An additional wire is required to connect the meta box to the Valve. Press the receiver's reset button.		

	connected by a secure ground.		button.
OBSERVED PROBLEM	POSSBILE CAUSE		REMEDY
B) Transmission: (motor does not turn)	1. Dead batteries.	1. Replace the batteries in the receiver and/or remote handset (Quality Alkaline recommended WARNING  Do not use metal tools to remove batteries. Doing so will render the receiver in  Application with internal and external battery box.  WARNING  Battery clip must not come into contact with metal parts after unplugging the external battery holder, because there is voltage stored in the receiver.	
	Power Outage     Receiver must learn new code.	2. During a power outage the AC Mains Adapter must be unplugged from the receiver to operate in the battery Mode.  3. Press and hold the receiver's reset button until you hear 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 acoustic signal confirming the new code is set.  RESET	
	4. The receiver is surrounded by metal, reducing the transmission range.  Output  Description:	Make sure that Not too close to	REPORTED AND ADDRESS OF THE PARTY OF THE PAR

OBSERVED PROBLEM	POSSBILE CAUSE	REMEDY
Continuation  B) No Transmission:   (motor does not turn)	5. Receiver	5. Replace receiver and reprogram code (see Observed Problem B, Remedy 3)
	6. Transmitter	6. Replace the transmitter and reprogram code (see Observed Problem B, Remedy 3).
	7. Bent pins on 8 wire connector on the Valve and receiver (see module and valve below)	7. Straighten pins on 8 wire connector Module/Receiver  Make sure pins are not bent
	8. Wiring at valve damaged.	8. Replace valve.
	9. Touch pad blocks transmission	9. Unplug touch pad, press reset button on receiver (see figure 4), test the transmitter, plug in touch pad.
	10. IR-Eye (infrared remote only)	10. Replace (check and change)
C) No ignition; No Tone:	1. Receiver	Replace receiver and reprogram code     (see Observed Problem B, Remedy 3)
<b>D)</b> No Ignition; One 5 second Continuous tone:	1. ON/OFF switch is in (o) OFF position.	1. Push switch to (-) ON position (see valve switch below)  Valve Switch 8 Wire Connector
	2. Loose wire.	2. Secure wire.
	3. Receiver	3. Replace receiver and reprogram code (Observed Problem B, Remedy 3)
	4. Bent pins on 8 wire connector (see module/receiver above)	4. Straighten pins on 8 wire connector.
	5. Valve	<b>5.</b> Replace valve. Do not overtighten the thermocouple interrupter.
E. No Pilot flame but spark:	1. No gas supply.	1. check the gas supply.
	2. Air in the pilot supply line.	Purge the line or start ignition several times.
	3. Thermocouple circuit wired incorrectly.	Check polarity of the thermocouple wires.
	4. No spark at pilot burner.	Check manufacturer's instructions for pilot setup; check wiring connection.     Check for spark in location along cable.
	5. Valve	<b>5.</b> Replace valve. Do not overtighten the thermocouple interrupter.
	6. Receiver	6. Replace receiver and reprogram code (see Observed Problem B, Remedy 3)

OBSERVED PROBLEM	POSSBILE CAUSE	REMEDY
F. Pilot is lit and sparking stops. Valve shuts off after 1060 seconds. Valve does not operate manually.  Note: For manual operation turn the valve knob to the manual position and hold the safety magnet open with a pen for approximately 60 seconds (see Valve below).	Not enough voltage generated from the thermocouple or too much resistance in the circuit.  Note: to find which part of the circuit is causing the problem, a checklist for each application can be prepared using an Excel calculation available from Mertik Maxitrol.  Possible parts causing excessive Resistance are: ON-OFF switch, Temperature switches, thermo Current connections, Receiver.	1. Use a digital multimeter set in the mV range and measure the voltage by connecting the test leads to the outer surface, directly beside the magnet nut (see figure ). The available voltage must be at least 5 mV. The manufacturer must specify The drop time can be measured after the thermocouple is heated.
670	2. Thermocouple	2. Replace thermocouple.
Suite	3. Low inlet pressure to valve.	<ol> <li>Confirm sufficient inlet pressure to the Valve. Adjust or replace inlet regulator if necessary.</li> </ol>
	4. Valve	<b>4.</b> Replace valve. Do not overtighten the Thermocouple interrupter.
<b>G)</b> 3 short beeps while the motor Turns:	1. Batteries (Receiver) are low.	Replace batteries (Quality Alkaline recommended).      WARNING  Do not use metal tools to remove
		batteries. Doing so will render the receiver inoperable
H) Pilot flame lights but there is no main gas flow.	Manual override knob. (if equipped) is in Standing Pilot Operation.	Turn Manual override knob to ON position.
	2. Valve turned down to pilot flow.	2. Turn flame to high fire by pressing up button on remote handset.
	3. Low inlet pressure to valve.	3. Confirm sufficient inlet pressure to the Valve. Adjust or replace inlet regulator If necessary.
	4. Valve.	<b>4.</b> Replace valve. Do not overtighten the thermocouple interrupter.
1) No response from the Receiver:	1. Loose ground connection at the valve.	Check ground connection at the valve and tighten screw. Reset receiver.