

## R300 Control System with Thermostatic/Timer Handset

### OPERATING INSTRUCTIONS

### FOR OEM USE ONLY

#### ⚠ WARNING

##### 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 can NOT reach the gas supplier, call the fire department.

Read these instructions carefully and completely before installing or operating. Failure to follow them could result in a fire or explosion causing property damage, personal injury, or loss of life. Service and installation **must** be performed by a trained/experienced service technician.

#### ⚠ WARNING

- All products used with combustible gas **must** be installed and used **strictly** in accordance with the instructions of the Original Equipment Manufacturer (OEM) and with all applicable government codes and regulations, e.g. plumbing, mechanical, and electrical codes and practices. These instructions do NOT supersede OEM's installation or operating instructions.
- Do NOT use a product if you suspect it has been subjected to high temperatures, damaged, tampered with, or taken apart.
- Do NOT use a product if you suspect it has been under water or that liquid has seeped into the product. Any of these incidents can cause leakage or other damage that may affect proper operation and cause potentially dangerous combustion problems.
- Flue 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.
- 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.
- **Before operating** verify that no gas is in the area around the appliance, including near the floor.

### DESCRIPTION

The R300 control system works with Maxitrol's GV34 series combination gas control valves. It can be operated manually or set to automatically adjust the appliance to control space temperature. The system offers the following three modes of operation:

#### Manual Mode

Adjustments are based on user input.

#### Thermostatic Mode

The user can choose a space temperature (set-point) and the valve adjusts automatically to maintain that temperature.

#### Timer Mode

Available to change the selected space temperature (set-point) at a pre-programmed time.



Figure 1: Components of the R300 Control System with Thermostatic/Timer handset

#### NOTICE

When using the GV34 Remote Control System, please refer to Maxitrol's corresponding installation instructions "GV34 Multifunctional Gas Control System" (Document Code GV34-II-EN-11.2008).

### TECHNICAL DATA

#### Radio Frequency Remote

868 MHz for Europe; 915 MHz for U.S. (FCC ID:UX5-R300A) and for Canada (IC: 4943B-R300A).

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

2 x 1.5 V "AAA" (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 Maxitrol or an AC Mains Adapter approved by Maxitrol can be used).

**Battery Replacement**

Battery replacement is recommended at the beginning of each heating season. 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.

**THERMOSTATIC/TIMER HANDSET FEATURES**

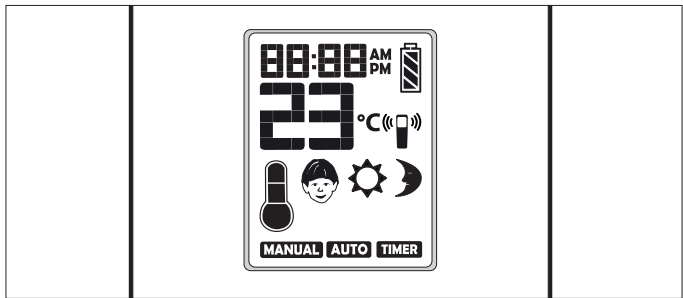


Figure 2: R300 Thermostatic/Timer Handset LCD Icons

LCD ICON	FEATURE	DESCRIPTION
	Clock Display	Set to 12 or 24 hour clock.
	Battery Life Indicator	Outline starts blinking with approx. 30 days battery life remaining.
	Main Display	Used to show Ambient Temperature, Setpoints, and Timer 1 and Timer 2.
	Communication Indicator	Indicates the handset is transmitting to the controller.
	Temperature Range Indicator	Indicates handset is operating automatically. The set-point temperature is relative to the current ambient temperature. (See below)
	Child Safety Lock	When ON (icon showing), the right button must be pushed twice within 0.5 seconds to increase flame height.
	Timer ON Icon	Indicates Timer ON Setpoint is active.
	Timer OFF Icon/Sleep Mode	After 8 hours of no signal between the handset and the receiver, valve runs to pilot and Sleep Mode Icon is displayed. Also indicates Timer OFF Setpoint is active.
	Manual Mode	Indicates system can be operated manually.
	Thermostatic Mode (Automatic)	Indicates system is operating automatically.
	Timer Mode	Indicates system timers are active.

**TEMPERATURE RANGE INDICATOR**

Indicates set point temperature is within this range:



- 1 bar:** Ambient temperature is > set-point temperature +2°C.
- 2 bars:** Ambient temperature is within +/- 2°C of set-point temperature.
- 3 bars:** Ambient temperature is < set-point +2°C.

**SETTING THE ELECTRONICS CODE**

**RADIO FREQUENCY REMOTE**

A code is selected automatically for all Maxitrol electronics from among 65,000 random codes available.

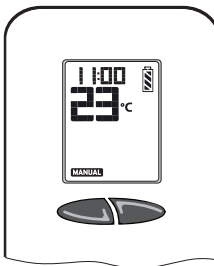
On initial and subsequent receiver battery changes, the receiver has to learn the code of the handset:

- Power the handset by inserting batteries.
- Insert batteries in receiver. LED on receiver will start to blink.
- While LED on receiver is blinking, press any button on the handset.
- When LED on the receiver stops blinking, the code is set.

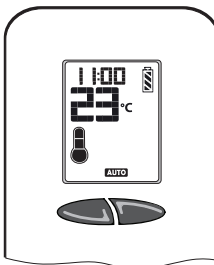
**NOTE:** These remote handsets and receivers are not interchangeable with previous versions. For all lighting instructions please refer to appliance manufacturer's instructions.

**CHANGING THE MODE OF OPERATION**

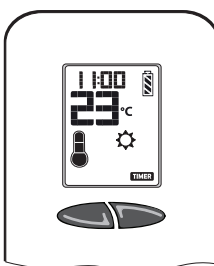
1. Press and release both buttons to change the mode of operation in the following order:



- **Manual Mode:** Manual Mode icon **MANUAL** is shown along with ambient temperature, battery life indicator, and current time.



- **Thermostatic Mode:** Thermostatic Mode icon **AUTO** is shown along with ambient temperature, battery life indicator, and current time.






- **Timer Mode:** Timer Mode icon **TIMER** is shown along with ambient temperature, battery life indicator, temperature range indicator, the current time, and either Timer ON (sun) or Timer OFF (moon) visible.

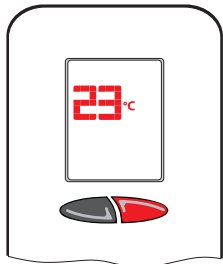
**INITIAL SETUP – PROGRAMMING MODE**

**NOTICE**


Read through this entire NOTICE before attempting Initial Setup / Programming.

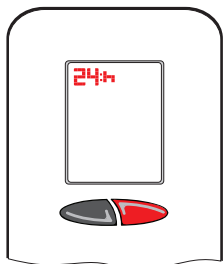
- A red number/icon indicates the icon is blinking. This will help determine which menu item is being set or programmed.
- When programming a menu item, use the right (up) button ONLY. Pressing the left (down) button will cause the programming menu to skip to the next menu item. If you accidentally skip to the next menu item, you must cycle through all the menu items to return to the item you were programming.
- Adjusting a menu item, the number will scroll up only (1, 2, 3...) and will cycle back to the beginning number.
- 15 seconds of inactivity will cause the remote to automatically go to operation mode. Follow Step 1 in INITIAL SETUP – PROGRAMMING MODE (below) to return to programming mode. Any changes will be saved each time you exit programming mode.
- If the Sun and Moon icons are both flashing, the timers are incorrectly set. The OFF time is overlapping the ON time. The timers must be reset.

- Press both buttons  and hold for 5 seconds (until screen blinks) to enter Programming Mode.
- Press down button  to scroll through menu items.
- Press up button  to adjust menu items.



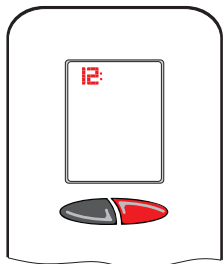
**Setting °F or °C**

1. Press up button  to choose either °F or °C.
  - Press down button  to set and scroll to the next menu item.





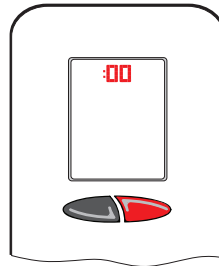
**Setting 12 or 24 Hour Mode**

2. Press up button  to choose either "12" or "24".
  - Press down button  to set and scroll to the next menu item.





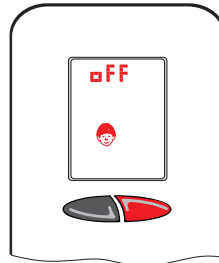
**Setting The Hour**

3. Press up button  to set the Hour, 1 to 12 or 0 to 23.
  - **NOTE:** Use right (up) button only. Numbers scroll up (1, 2, 3, ...) to 12 or 23 then cycle back to 1 or 0.
  - Press down button  to set and scroll to the next menu item.






**Setting The Minutes**

4. Press up button  to set Minutes, 00-59.
  - **NOTE:** Use right (up) button only.
  - Press down button  to set and scroll to the next menu item.



**Setting Child Safety Lock**



5. Press up button  to active or deactivate the Child proof lock.
  - **NOTE:** If the Child Safety Lock in ON,  is displayed and the handset is rendered inoperable. To deactivate enter again Programming Mode.

6. This concludes your basic programming. The remote will automatically save your changes and go into operation mode after 15 seconds of inactivity.
7. Or you can go into Timer Mode Programming. Press down button  to set and scroll to the next menu item. This will enter you into Timer Mode Programming.

**FLAME HEIGHT ADJUSTMENT**



**Manual Mode**

(Manually Adjusting Flame Height)

- Press up button  to turn the main burner ON or to increase the flame height.
- Press down button  to decrease the the flame height or turn main burner OFF.



**Thermostatic Mode**

Flame height adjusts automatically to achieve set temperature.


- Press up button  to increase or down button  to decrease setpoint by 1 °F/C.\*
- **NOTE:** When entering Thermostatic mode, the current ambient temperature is the initial setpoint temperature.

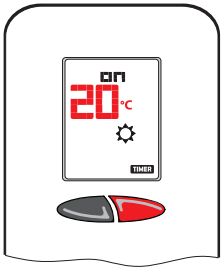
**Timer Mode**

Each can be programmed for a single Timer ON temperature and a single Timer OFF temperature. Timer 1 and Timer 2 can be programmed to go ON and OFF at specific times.



- Press up button  to increase or down button  to decrease setpoint by 1 °F/C.\*
- **NOTE:** Manually adjusting the temperature in Timer Mode changes the setpoint temperature of Timer 1 or Timer 2.

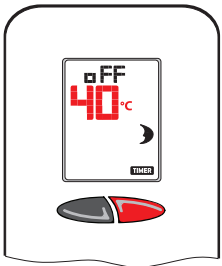
## TIMER PROGRAMMING MODE

**NOTE:** Use up button  only to adjust menu items. Numbers scroll up to the highest setting and then cycle back to the beginning number. Temperature setting cycle back to OFF or pilot (“--”).





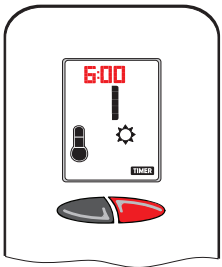
### Setting “ON” temperature

1. Press up button  to set ON temperature for BOTH Timer 1 and 2 (Sun icon visible).
  - Press down button  to set and scroll to the next menu item.





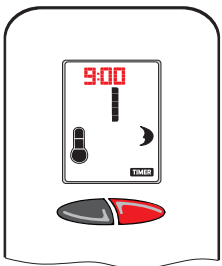
### Setting “OFF” temperature

2. Press up button  to set OFF temperature for BOTH Timer 1 and 2 (Moon icon visible).
    - Press down button  to set and scroll to the next menu item.
- NOTE:** OFF temperature can not be set higher than your ON temperature.





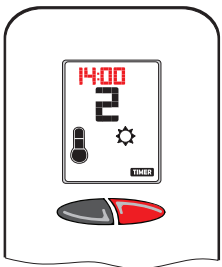
### Setting Timer 1 “ON” time

3. Press up button  to set ON time (scrolls in 15 minute increments).
  - Press down button  to set and scroll to the next menu item.





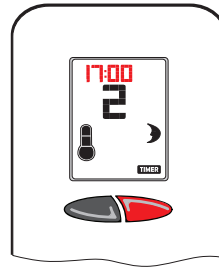
### Setting timer 1 “OFF” time

4. Press up button  to set OFF time (scrolls in 15 minute increments).
  - Press down button  to set and scroll to the next menu item.





### Setting timer 2 “ON” time

5. Press up button  to set ON time (scrolls in 15 minute increments).
  - Press down button  to set and scroll to the next menu item.




### Setting timer 2 “OFF” time

6. Press up button  to set OFF time (in 15 minute increments).
  - Press down button  to set and scroll to the next menu item.

7. This concludes programming Timers 1 and 2. The remote will automatically save your changes and go into operation mode after 15 seconds of inactivity.

## SLEEP MODE

After 8 hours of no signal between the handset and receiver, valve runs to pilot and  Sleep Mode Icon is displayed.

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