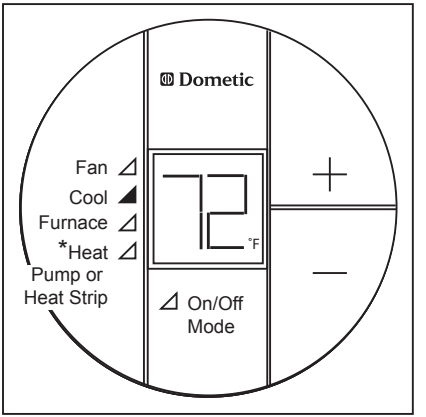
Dometic



Single Zone LCD Thermostat Operating Instructions

MODEL
3313192.XXX Cool/Furnace
3313193.XXX Cool/Furnace/Heat Pump
3313194.XXX Cool/Furnace/Heat Strip

REVISION
Form No. 3313327.045 6/12
(Replaces 3313327.037)
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LaGrange, IN 46761

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About Your New Thermostat

Congratulations! Your recreational vehicle manufacturer has equipped your RV with the most advanced RV thermostat. Your Dometic Single Zone LCD thermostat has been designed for ease of operation and for many years of reliable service.

Features

- Liquid Crystal Display and Green LED Mode Indicators
- Auto Fan
- Indoor Temperature Display
- °F / °C Display
- Air conditioner can provide additional indoor air circulation during furnace operation.

To help familiarize yourself with the operation of the Single Zone LCD thermostat, review the following diagrams and accompanying text that explain the functional characteristics of this system.

Your Single Zone LCD thermostat is equipped with both a liquid crystal display (LCD) that identifies the temperature set-point, fan speed (Auto, Low, High), and F/C and green LEDs that indicate the mode of operation (Off, Fan, Cool, Furnace, Heat Pump or Heat Strip*). The modes of operation available will vary depending on the system installed in your RV.

* Select models.

System Initialization

A system initialization will need to be performed by the installer after the system is installed.

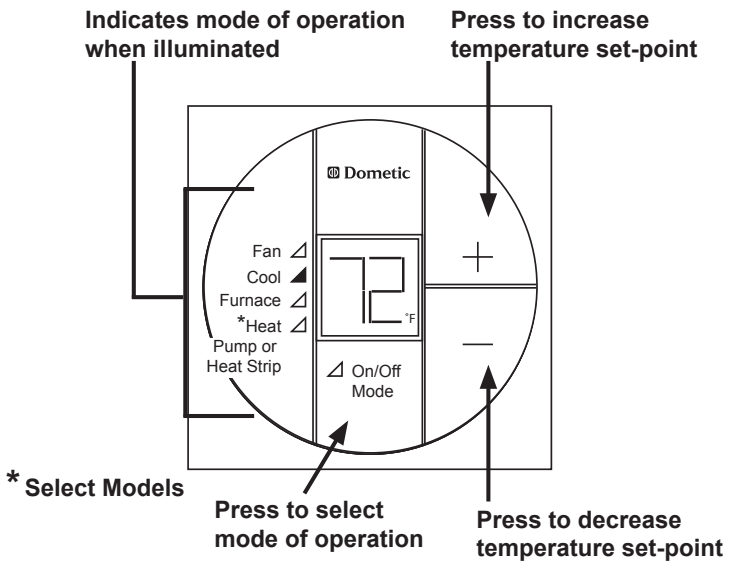
- Make sure the Single Zone LCD thermostat is in the Off condition. See page 4, **"Quick Reference To Control Buttons"**.
- Press the "**+**" button and, while holding it, also press and hold the **On/Off Mode** button for three seconds. LCD will show **— — .** Press the **On/Off Mode** button again to turn system off. This completes the initialization.

The furnace On/Off temperature differential should be set at this time. See **"Mode Description - Furnace"** on page 8 for further information on furnace mode differential setting.

Your Dometic Single Zone LCD thermostat has been pre-programmed. Review settings below and adjust the settings to your personal comfort level.

Factory Preset Settings	
Heating	68 ºF / 20 ºC
Cooling	72 ºF / 22 ºC
Fan Speed	Auto
Mode	Off
Furnace Differential	2 ºF

Quick Reference To Control Buttons



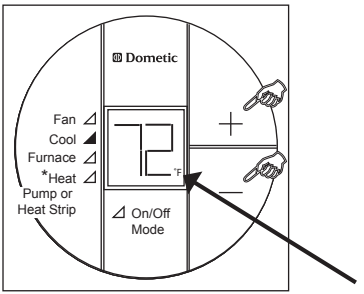
Programming & Operations

On/Off

To turn On the Single Zone LCD thermostat, press the **On/Off Mode** button. The LCD will be activated. To turn Off the Single Zone LCD thermostat press the **On/Off Mode** button and toggle through the modes until the On/Off green LED is on. The LCD will go out and the green LED will remain on for approximately 15 seconds, then go out.

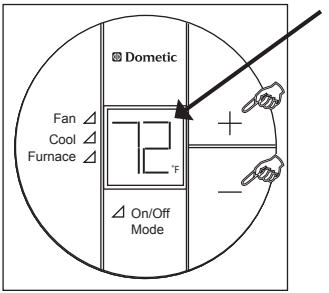
Temperature Format ºF / ºC

Simultaneously press the "**+**" and "**—**" buttons to toggle between Fahrenheit and Centigrade format. **ºF** indicates Fahrenheit and **ºC** indicates Centigrade.



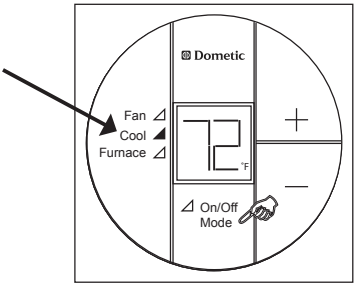
Inside Temperature

To display the Inside Temperature, the Single Zone LCD thermostat must be in the **Off Mode**. Press either the "**+**" or "**—**" button to display the Inside Temperature.



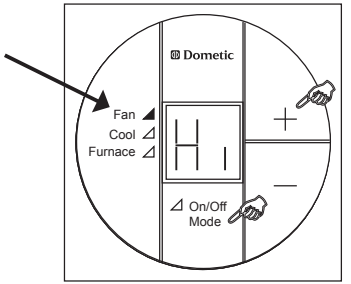
Mode Selection

Press the **On/Off Mode** button to advance through the available modes. Each successive press will advance to the next available mode. The green LED will indicate the mode selected. Depending on the systems installed, your choices will be Off, Fan, Cool, Furnace, Heat Pump or Heat Strip. See **"Mode Description"** on pages 8-10 for more information on modes.



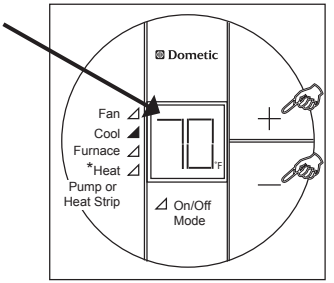
Fan Speed

Press the **On/Off Mode** button until the fan green LED is lit. The LCD will show “Lo” (Low), “Hi” (High) or “Au” (Auto). Press the “**+**” or “**—**” button to select the desired fan speed. See **“Special Features”** on page 11 for more information on Auto Fan.



Temperature Set-Point

Press the “**+**” or “**—**” button to change the temperature set-point. The temperature set-point is indicated by two digits on the LCD. Press the “**+**” to increase or the “**—**” to decrease the temperature set-point. The maximum set-point for the system is 90 ºF. The minimum set-point is determined by the active operating mode. For heating, the minimum is 40 ºF and minimum for cooling is 55 ºF.



Mode Description

"Off" - Off Mode
When selected, the LCD will be blank and the Off green LED will turn on for 15 seconds, then it will turn off.

"Cool" - Cool Mode
In the **Cool Mode** the system will cycle the compressor On and Off based on the room air temperature and the temperature set-point on the Single Zone LCD thermostat. The fan will turn on first followed by the compressor in approximately 2 minutes. In this mode there are 3 fan speed selections:
Lo - (LOW): The fan operates continuously at low speed. The compressor cycles On and Off.
Hi - (HIGH): The fan operates continuously at high speed. The compressor cycles On and Off.
Au - (AUTO): When auto fan is selected the fan speed will vary depending on the difference between the temperature set-point and the room air temperature. In auto fan the compressor and the fan will cycle **On** and **Off** with the thermostat. See **"Special Features"** on page 11 for more information on auto fan.

"Furnace" - Furnace Mode
In this mode there are 3 fan speed selections:
Lo - (LOW): The fan operates continuously at low speed.
Hi - (HIGH): The fan operates continuously at high speed.
Au - (AUTO): The fan will be Off.
Note: If additional indoor air circulation provided by the air conditioner is not desired during **Furnace Mode** of operation, select Au (AUTO) in the **Fan Mode** to shut the air conditioner fan off. If Lo (LOW) or Hi (HIGH) is selected the air conditioner fan will continue to operate on the selected speed.

In the **FURNACE Mode** the system will cycle the RV's furnace On and Off based on the room air temperature and the temperature set-point on the Single Zone LCD thermostat. The system can be configured to operate using an On/Off differential of either 1 degree F or 2 degree F. This feature is programmed during the system initialization. See **"System Initialization"** on page 3.

To set the temperature differential the system must be Off. Press the "**—**" button and, while holding it, also press and hold the **On/Off Mode** button for three seconds. Release the **On/Off Mode** button. Then release the "**—**" button. Press the "**+**" button to toggle between "**d1**" and "**d2**", **"d1"** for 1 degree F differential and **"d2"** for 2 degrees F differential.

"Heat Pump" - Heat Pump Mode (Select Models)
Heat Pump Operation: This mode of operation is customer chosen and is usually selected when temperatures are below 70 °F and the customer needs warmth in the living space rather than cool down. This reverses the refrigerant flow in the air conditioner and causes the inside air to dispense warm air rather than cold and the outside air to dispense cold air rather than warm.

This mode of operation creates a dilemma where the outside coil which is now dispensing cold air can freeze up due to the cold air blowing across the coil mixed with the outside temperature. A freeze up of the system can render your heat pump inoperable. Therefore, we have a defrost feature that will prevent this from happening. See **"Special Features"**, on page 11 for more information on defrost cycle.

In the **Heat Pump Mode** the system will cycle the compressor **On** and **Off** based on the room air temperature and the temperature set-point on the Single Zone LCD thermostat. When the system calls for heating there will be a delay of approximately two minutes. In auto fan, the compressor will turn On first followed by the fan in approximately 15 seconds. In this mode there are 3 fan speed selections:
Lo - (LOW): The fan operates continuously at low speed. The compressor cycles On and Off.
Hi - (HIGH): The fan operates continuously at high speed. The compressor cycles On and Off.
Au - (AUTO): When auto fan is selected the fan speed will vary depending on the difference between the temperature set-point and the room temperature. In auto fan the compressor and fan will cycle **On** and **Off** with the thermostat. The compressor shuts off first followed by the fan in approximately 15 seconds. See **"Special Features"** on page 11 for more information on auto fan.

"Heat Strip" - Heat Strip Mode (Select Models)
In the **Heat Strip Mode** the system will cycle the heat strip **On** and **Off** based on the room air temperature and the temperature set-point on the Single Zone LCD thermostat. In this mode there are 3 fan speed selections:
Lo - (LOW): The fan operates continuously at low speed. The heat strip cycles **On** and **Off**.
Hi - (HIGH): The fan operates continuously at high speed. The heat strip cycles **On** and **Off**.
Au - (AUTO): The fan operates in low speed and will cycle **On** and **Off** with the thermostat.

"Fan" - Fan Mode
In **Fan Mode** there are 3 fan speed selections:
Lo - (LOW): The fan operates continuously at low speed.
Hi - (HIGH): The fan operates continuously at high speed.
Au - (AUTO): The fan will be **Off**.

Special Features

Auto Fan

When auto fan is selected the fan speed will vary depending on the difference between the temperature set-point and the room temperature. In auto fan the compressor and fan cycle **On** and **Off** with the thermostat.

When the difference is:

>5º The fan operates on HIGH

<4º The fan operates on LOW

Compressor Time Delay

A time delay of approximately two minutes occurs any time the compressor is required to begin the cooling or heat pump cycle.

Defrost Cycle

During heat pump operation, if the outside coil begins to freeze up, a defrost cycle is initiated that temporarily puts the heat pump back into air conditioning mode. This reverses the refrigerant flow and melts the ice forming on the outside coil. Typically this occurs when the outside temperatures are below 42 °F and repeats every 25 minutes of compressor run time as long as the outside temperature stays below 42 °F and above 30 °F. Therefore, during this period of operation you, (the user) will temporarily feel cold air inside the RV at the registers. **This is normal and is NOT an indication of malfunction**. (Note: Defrost cycling shall continue until the measured temperature of the Outdoor Sensor is ≤30 °F or ≥42 °F.)

Low Ambient Heat Pump Lock Out

All heat pumps are constrained to operation at a temperature range that is determined by outside conditions. Since all heat pumps lose their efficiency at low outside ambient temperatures, the Dometic heat pump has a lock out feature that prevents heat pump mode of operation when temperatures fall below 30 °F. If you have the system set in the **Auto Mode** the fan will be turned **OFF.** Only the fan will remain **ON** if the fan setting is set at Low or High, however the compressor will not run and there will be no heat function below 30 °F.

Power Interruption

In the event the power to the air conditioner or control is interrupted, the system will restart with the previous set points once power is restored.

LCD Error Code

When the system determines that one of the faults listed below has occurred an error code will be displayed in the LCD.

Error Code:

E1 Loss of communication between the Single Zone LCD thermostat and the module board. LCD will cycle between E1 and the previous mode setting. System will shut down.

E2 Open circuit or out of range Indoor Temperature Sensor. Heating and cooling operation will be locked out. Fan operation can continue to operate.

E3 Shorted Indoor Temperature Sensor. Heating and cooling operation will be locked out. Fan operation can continue to operate.

E4 Open circuit or out of range Outdoor Temperature Sensor (select models). Heat Pump operation will be locked out. Air Conditioner, Fan and Furnace operation can continue to operate.

E5 Open circuit or out of range Freeze Sensor. Air conditioner mode of operation will be locked out. Furnace, heat strip, heat pump and fan mode of operation can continue to operate but displays the last temperature set-point.

General Information

A. The ability of the air conditioner to maintain the desired inside temperature depends on the heat gain of the RV. Some preventative measures taken by the occupants of the RV can reduce the heat gain and improve the performance of the air conditioner. During extremely high outdoor temperatures, the heat gain of the vehicle may be reduced by:
   1. Parking the RV in a shaded area
   2. Using window shades (blinds and/or curtains)
   3. Keeping windows and doors shut or minimizing usage
   4. Avoiding the use of heat producing appliances

   Operation on High Fan/Cooling mode will give optimum or maximum efficiency in high humidity or high outside temperatures.
   Starting the air conditioner early in the morning and giving it a "head start" on the expected high outdoor ambient will greatly improve its ability to maintain the desired indoor temperature.
   For a more permanent solution to high heat gain, accessories like Dometic outdoor patio and window awnings will reduce heat gain by removing the direct sun. They also add a nice area to enjoy company during the cool of the evening.

B. The manufacturer of this air conditioner will not be responsible for damage caused by condensed moisture on ceilings or other surfaces. Air contains moisture and this moisture tends to condense on cold surfaces. When air enters the RV, condensed moisture may appear on the ceiling, windows, metal parts, etc. During normal operation, this unit removes moisture from the air. Keeping doors and windows closed when this air conditioner is in operation will minimize condensed moisture on cold surfaces.

Maintenance

Air Filter - Periodically (a minimum of every 2 weeks of operation) remove the return air filter located behind the return air grille and wash the filter with soap and warm water, let dry, and then reinstall. **NEVER** run the air conditioner without the air filter in place. This will plug the unit evaporator coil with dirt and may substantially degrade the performance of the unit over time.

Dometic Single Zone LCD thermostat: Clean the Single Zone LCD thermostat with a moist soft cloth. **DO NOT** spray water directly on the Single Zone LCD thermostat. **DO NOT** use solvents for cleaning.

Service

In the unlikely event the unit fails to operate or operates improperly, check the following before calling your service center.

1. If your RV is connected to a motor generator, check to be sure the motor generator is running and producing power.
2. If the RV is connected to a power supply by a land line, check to be sure the line is sized properly to run air conditioner load and it is plugged into the power supply.
3. Check your 120 Vac fuse or circuit breaker to see if it is open.
4. Check your 12 Vdc fuse or circuit breaker to see if it is open.
5. After the above checks, call your local service center for further help. This unit must be serviced by qualified service personnel only.

When calling for service, always give the following:

1. Air conditioner/heat pump Model Number and Serial Number found on Identification Label located on the Base Pan of the unit. It is necessary to remove the return air cover to expose the rating plate.
2. Electronic Control Kit Part Number and Serial Number found on Identification Label located on the side of the Kit. This kit is mounted in the return air cavity and can be exposed by removing the return air cover.

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519-720-9578

For Service Center Assistance Call:
800-544-4881