



## Wireless Thermostat For Direct Damper Control

## User Manual Model T200WL01

Made in USA

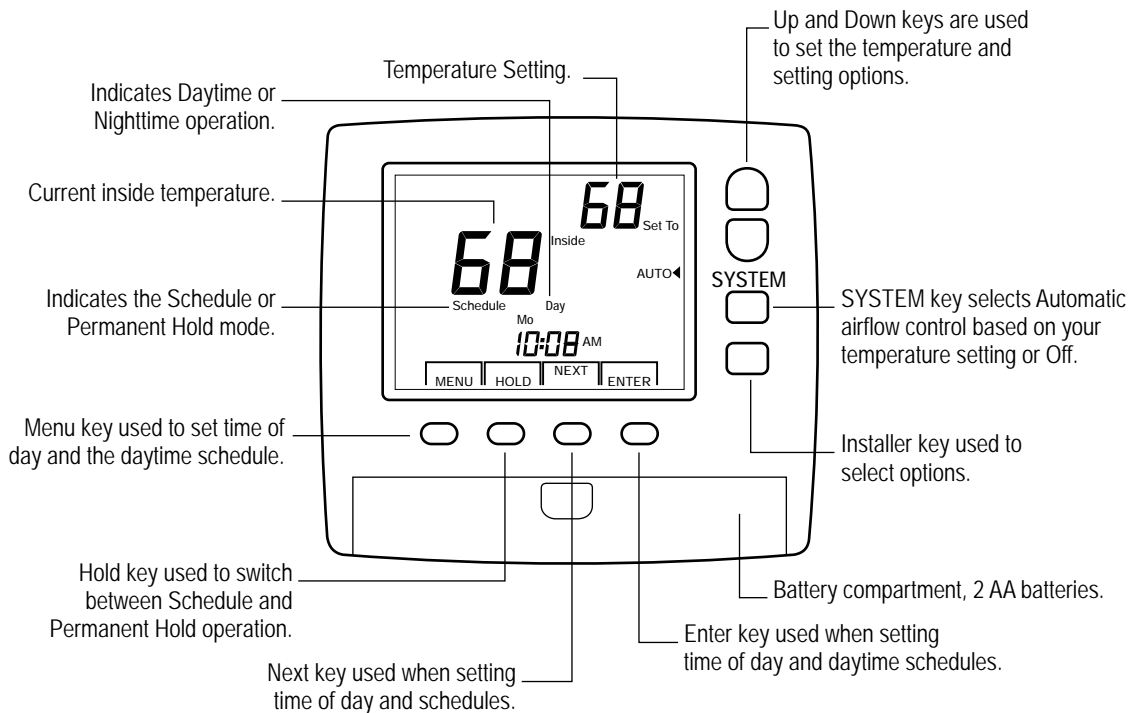
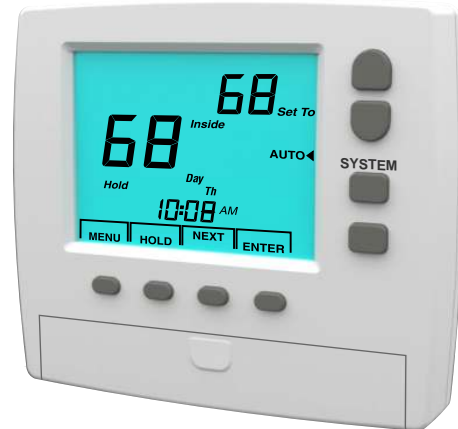
### Improved Comfort

Your wireless thermostat and damper have been installed and will automatically control airflow to maintain the temperature you set and eliminate the discomfort caused by overcooling and overheating.

### Energy Savings

Excess airflow that causes overcooling or overheating is automatically redirected to areas that need it; the thermostat is satisfied quicker and the HVAC system operates less.

The thermostat has an Off position that can shut the airflow down to provide even greater energy savings when the office or space is not being used. The night setback feature works the same way and provides added energy savings.



## Operation

Your thermostat controls the WCD Damper installed above the ceiling diffuser via an RF wireless data link. It monitors the space temperature and the temperature you set and sends instructions to the damper telling it that the space is too cold or too warm.

The damper has a temperature sensor that monitors whether the HVAC system is in heating or cooling mode. Airflow is periodically increased or decreased until the comfort level you set is achieved. This thermostat and damper cannot offset lack of HVAC system heating or cooling capacity.

## Operating Modes

The thermostat and damper control airflow in three modes—Daytime operation, Nighttime operation and Off.

In Daytime operation, airflow is controlled by the temperature setting, the inside or space temperature and whether the HVAC system is in heating or cooling mode.

In Nighttime operation, airflow is reduced to the preset Night level to save energy, and in Off mode the airflow is reduced to the preset Off level to save energy.

## Daytime Operation

In Daytime operation the thermostat adjusts airflow to maintain the space temperature at the comfort setting.

## Nighttime Operation

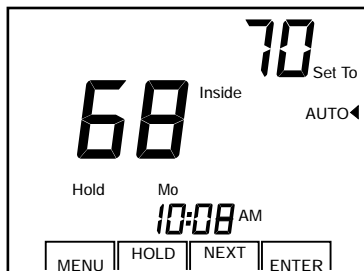
Nighttime operation automatically occurs in the Schedule mode and lowers the airflow to save energy.

## Off Operation

In Off, the thermostat lowers airflow to reduce energy consumption. Off mode can be set by the System key or can be programmed to selected days in the daytime/nighttime schedule.

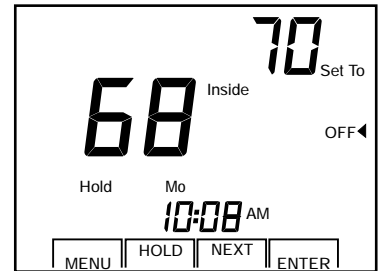
## Setting the Temperature

Press the Up or Down key to change the temperature setting. The LCD light comes on when a key is pressed.



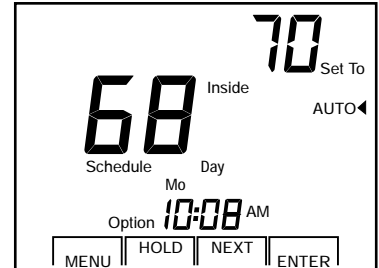
## Selecting OFF or Automatic Operation

Press the System key to toggle between Auto and Off.



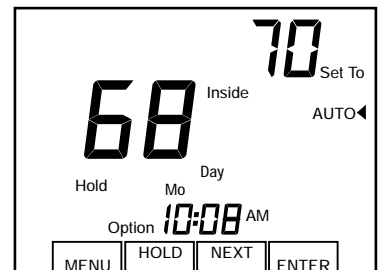
## Selecting Hold or Schedule Operation

Press the HOLD key to toggle between Hold and Schedule operation.



## Overriding the Night or Off Operation

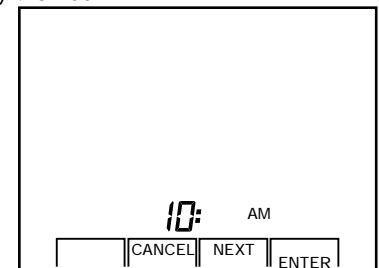
Pressing the Up or Down key to adjust the temperature when in the nighttime schedule or Off mode, returns the thermostat to Daytime operation. After two hours the thermostat returns to the Nighttime schedule or Off mode.



## Setting the Time of Day

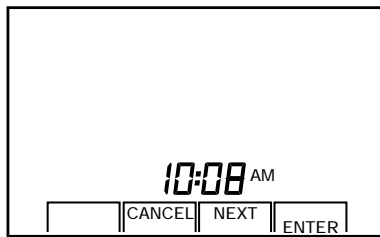
To set the time of day and the day of the week, press the Menu key and the LCD will display the hour.

Use the Up and Down keys to set the hour.



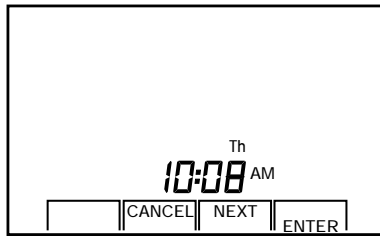
Press the Next key to set the minute.

Use the Up and Down keys to set the minute.

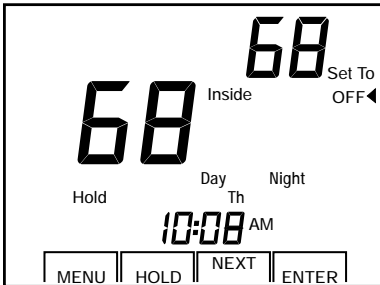


Press the Next key to set the day of the week.

Use the Up and Down keys to select the day.

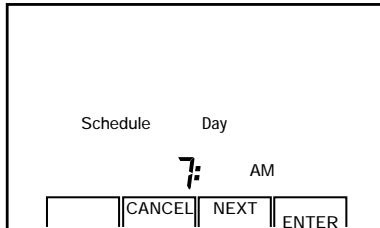


Press the Enter key when complete. The display returns to the normal time and temperature display.



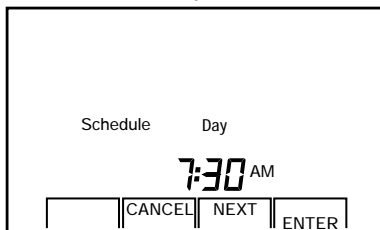
## Changing the Daytime Schedule

To change the Daytime schedule, press and hold the Menu key until the LCD displays the Daytime start hour.



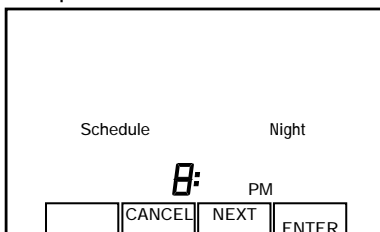
Use the Up and Down keys to set the hour for starting Daytime operation. If you do not want Daytime operation on certain days, see Setting Days Off. Press the Next key to set the

Use the Up and Down keys to set the minute for starting Daytime operation. The minute can be set to :00, :15, :30 or :45 minutes.



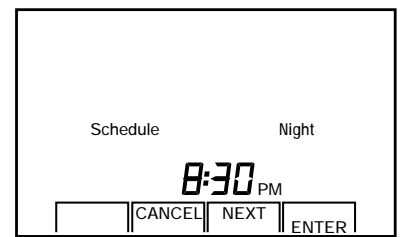
Press the Next key to set the hour for ending Daytime operation and starting Nighttime operation.

Use the Up and Down keys to set the hour for starting Nighttime operation.

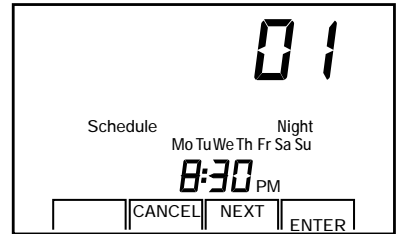


Press the Next key to set the minute for starting Nighttime operation.

Use the Up and Down keys to set the minute for starting Nighttime operation. The minute can be set to :00, :15, :30 or :45 minutes.



Press the Next key to select the days of the week for the schedule just entered.



All of the days will be displayed. Use the Next key to move between the days. The number in the upper right corner shows the day of the week being selected or deselected. 1 is Monday, 2 is Tuesday, etc.

Press the Up or Down keys to toggle the selected day on or off. The schedule will be applied to the days displayed. If a different schedule is required for other days, program the remaining days for the second schedule.

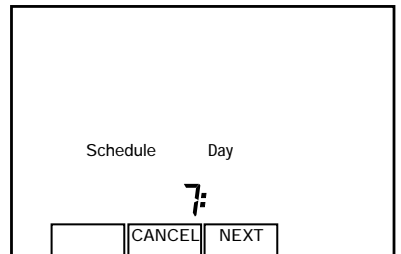
Press the Enter key when complete. The display returns to the normal time and temperature display.

The factory default schedule is shown below.

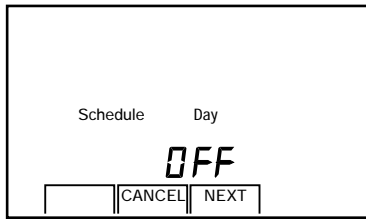
	Start Day Schedule	Stop Day Schedule
Monday	7:00AM	9:00PM
Tuesday	7:00AM	9:00PM
Wednesday	7:00AM	9:00PM
Thursday	7:00AM	9:00PM
Friday	7:00AM	9:00PM
Saturday	7:00AM	9:00PM
Sunday	7:00AM	9:00PM

## Setting the OFF Days

You can set some days that you will be off and the airflow will be reduced on those days to the preset Off level to save energy. Press the Menu key twice to start the schedule sequence.



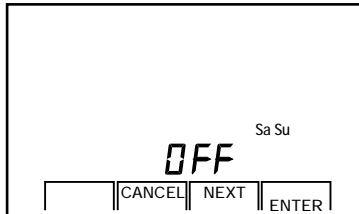
Press and hold the Up key to set OFF (12 midnight) as the start hour for Daytime operation.



Press the Next key to select the days for the Off schedule.

All of the days will be displayed. Use the Next key to move between the days. The number in the upper right corner shows the day being selected or deselected. 1 is Monday, 2 is Tuesday, etc.

Press the Up or Down keys to toggle the selected day on or off. The Off days will be the days displayed.

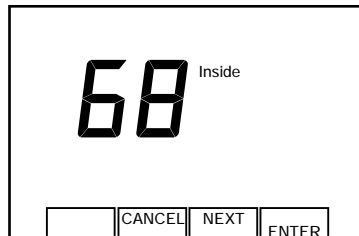


The example above shows the Off days are Saturday and Sunday. On those days, airflow is reduced to the preset Off level (typically 50%) set by your installer.

## Calibrating the Temperature Sensor

Press and hold the Menu key until the temperature is displayed.

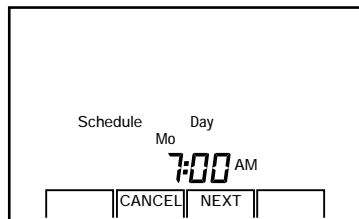
Use the Up and Down keys to set the correct temperature.



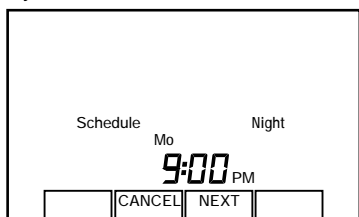
Press the Enter key to save the calibration and return to normal thermostat operation.

## Displaying the Schedule

Press and hold the MENU key until the Monday Day schedule is displayed.



Press and hold the Next key to sequentially display the Day and Night schedule for each day.

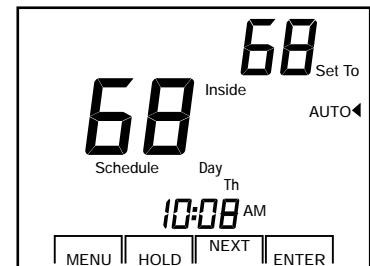
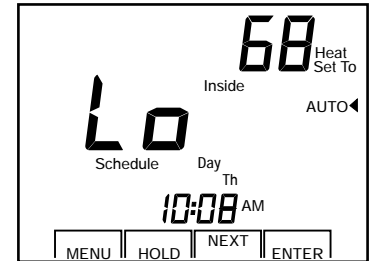


Press the Cancel key to return to normal operation.

## Low Battery Indication

When battery voltage drops from 3.3V down to 2.5V, the LCD will alternately display "Lo" in place of the Inside temperature, and the LCD backlighting is turned off to extend battery life. The wireless communication continues to operate but the range is reduced.

Batteries should be replaced with AA alkaline or lithium rechargeable batteries. Lithium batteries can be recharged with a compatible charger.



## 3-Year Limited Warranty

This is a "Limited Warranty" which gives you specific rights. You may have other rights which vary from state to state.

For a period of three years from the date of purchase, any malfunction caused by factory defective parts or workmanship will be corrected at no cost to you. See the complete Warranty at [eControlsUSA.com](http://eControlsUSA.com).



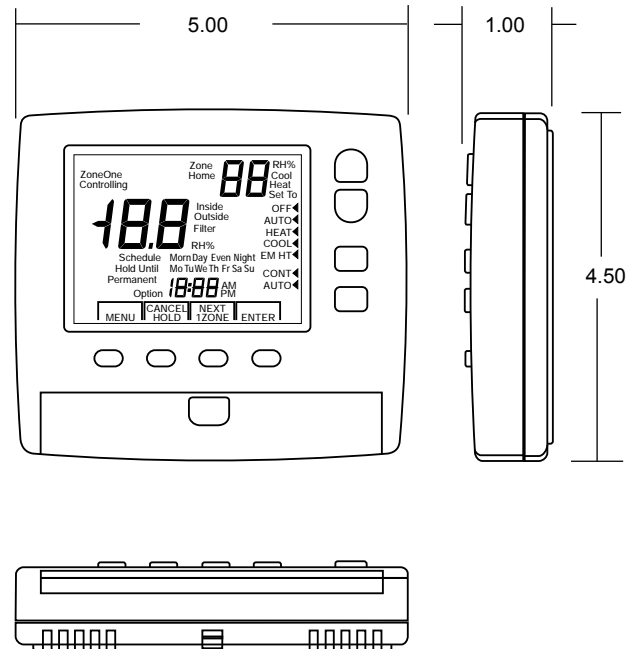
## Wireless Thermostat

Made in the USA

## Specification

### Model T200WL01

Operation	Automatically controls airflow based on temperature setting, space temperature and supply air temperature.
Temperature Sensor	Temperature sensor at the WCD damper senses heating or cooling calls.
Dampers	WCD Dampers / A80-WL Wireless Actuator
Airflow Control	100% to 0% or minimum airflow set by mechanical stop on the damper actuator.
Zones	1 zone with up to 32 dampers.
Addresses	32 different Addresses for different departments, groups or floors.
Schedule Mode	Programmable start and stop times for daytime operation using automatic airflow control based on temperature setting.
Hold Mode	Automatic airflow control based on temperature setting 24/7.
System Modes	Off or Auto. In Auto, airflow is controlled by temperature setting. In Off, the airflow is reduced to the preset Off level.
LCD Backlight	The LCD backlight is turned on whenever a key is pressed.
Wireless Control	Uses 915MHz ISM band with proprietary protocol. Indoor range is over 100 feet.
Battery Powered	Uses two AA batteries.
Dimensions	5.00 x 4.50 x 1.00 inches (LWD)



## Compatible Dampers

Operation	Wireless thermostat controlled airflow.
Close Limit	Limit closed position to insure minimum airflow when damper is closed.
Torque	80 oz-in.
Power	24VAC, 2.8VA
Housing	24 Ga galvanized steel.

## Model Numbers

T200WL01	Wireless Thermostat
TS-01	Supply Air Temperature Sensor
WCD-6	6-Inch Diameter Wireless Control Damper
WCD-8	8-Inch Diameter Wireless Control Damper
WCD-10	10-Inch Diameter Wireless Control Damper
WCD-12	12-Inch Diameter Wireless Control Damper
WCD-14	14-Inch Diameter Wireless Control Damper

## Installer Options

01	Zone Number	1 to 32 (1)
02	Home Number	1 to 32 (1)
03	Program Damper Address	Zone and Home Number
04	Deadband Temperature	1 to 5°F (1°F)
05	Update Interval	5 to 30 minutes (10 minutes)
06	LCD Backlight	On with key stroke
07	Maximum Setpoint	60 to 90°F (80°F)
08	Minimum Setpoint	55 to 80°F (65°F)
09	Damper Factor	8 or 16% per 1°F (8%)
10	Night Airflow	0 to 100% (50%)
11	Off Airflow	0 to 100% (50%)

Number in () is factory setting.



## Wireless Thermostat

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## Installation Instructions

Model T200WL01



### Applications

- Automatic control of airflow based on temperature setpoint.

### Features

- Set the temperature best suited for your comfort and the thermostat will adjust the airflow to insure the space is not overcooled or overheated.
- Over-conditioned airflow is automatically redirected to spaces that need it.
- Use the Nighttime feature to automatically reduce airflow at night.
- Automatically lower airflow on days the facility is closed.
- Manual or 7-day programmable operation.
- Battery operated. Requires no wiring.
- Large, backlit LCD display.

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Sensor	Temperature sensor at the WCD damper senses heating or cooling calls.
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