


The ZCDWLR 2-Zone Comfort Control works with any thermostat to provide you with a uniformly comfortable home in every season.

The ZCDWLR monitors the equipment for heating and cooling calls as well as the temperatures in the upstairs and downstairs zones. If the temperatures differ more than 2 degrees, the ZCDWLR automatically directs more heating or cooling to the zone that needs it.

Or, you can manually direct more heating or cooling to the upstairs or downstairs zone as desired.

The ZCDWLR includes a Nighttime Comfort option that automatically directs more heating or cooling to the upstairs sleeping zone and less to the unoccupied downstairs zone and is ideal for homes where all of the bedrooms are located upstairs.



 Look for this symbol throughout the manual to see how the ZCDWLR can save energy as well as reduce wasted energy.

To learn how the ZCDWLR complements smart thermostats with remote sensors, see page 4.



Understanding Your Installation

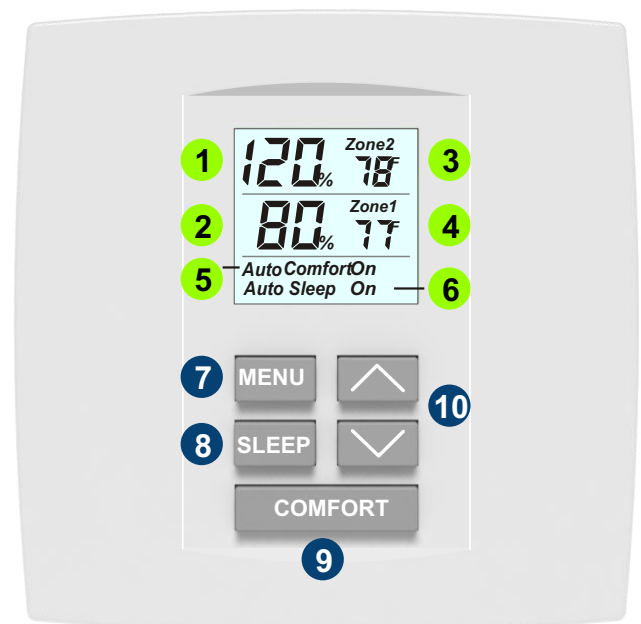
The ZCDWLR 2-Zone Control is typically installed in the downstairs zone (living space), a temperature sensor is installed in the upstairs zone (sleeping space), a damper control module is installed near the equipment and two modulating dampers are installed in the duct work to control the distribution of heating and cooling to the downstairs and upstairs zones.

Understanding Your 2-Zone Comfort Control

- 1 Displays Zone 2 Airflow.
- 2 Displays Zone 1 Airflow.
- 3 Displays Zone 2 Temperature.
- 4 Displays Zone 1 Temperature.
- 5 Displays whether Auto Comfort is On or Off. Default is On.
- 6 Displays whether Auto Sleep is On or Off. Default is Off.

Key Operation

- 7 The **MENU** key is used to access homeowner options such as Nighttime Comfort and temperature calibration.
- 8 The **SLEEP** key is used for Nighttime Comfort operation. See Nighttime Comfort for more information.
- 9 The **COMFORT** key is used to select Automatic Uniform Comfort, Downstairs Comfort or Upstairs Comfort.
- 10 The  or  keys are used to adjust settings




Comfort Control

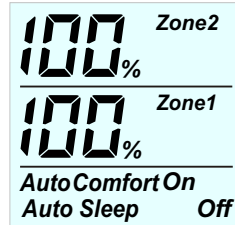
The ZCDWLR includes three different comfort options - Automatic Uniform Comfort, Downstairs Comfort Focus and Upstairs Comfort Focus that are designed to maximize your comfort and energy savings.

The ZCDWLR defaults to Automatic Uniform Comfort. Pressing the **COMFORT** key cycles through the comfort options.

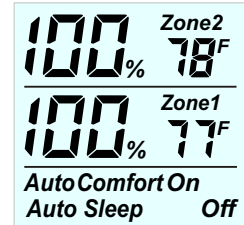
Automatic Uniform Comfort



In Uniform Comfort, the ZCDWLR monitors the upstairs and downstairs temperatures and automatically directs more heating or cooling to the zone that needs it every 2 minutes to keep the temperatures within 2 degrees to provide a balanced, uniformly comfortable home.

 Reduces the wasted energy caused by overcooling your downstairs zone in the summer to make your upstairs zone more comfortable or overheating your upstairs zone in the winter to make your downstairs zone more comfortable.




Press the **COMFORT** key until both ZONE1 airflow and ZONE2 airflow are displayed. The selection is saved when the backlight turns off.

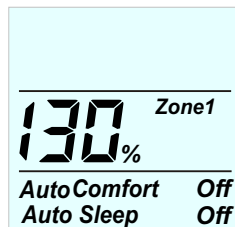


When Uniform Comfort is selected, the Zone1 airflow and Zone2 airflow are displayed, Auto Comfort indicates On and the  /  keys are disabled.

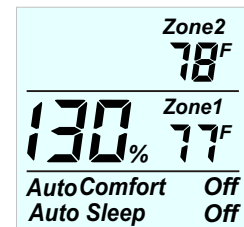
Downstairs Comfort Focus



In Downstairs Comfort, the ZCDWLR directs more heating or cooling to the downstairs zone and less to the upstairs zone, and is ideal for homes where the upstairs is rarely used.

 Reduces the wasted energy used to heat or cool the unoccupied upstairs zone and saves energy by satisfying the heating and cooling calls sooner.




Press the **COMFORT** key until only ZONE1 airflow is displayed. The selection is saved when the backlight turns off.

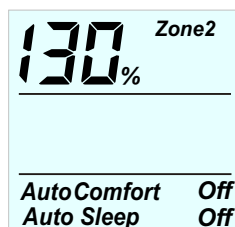


When Downstairs Comfort is selected, only Zone1 airflow is displayed and Auto Comfort indicates Off. Airflow can be adjusted at any time by pressing the  or  key.

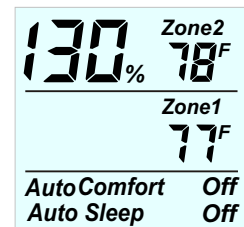
Upstairs Comfort Focus



In Upstairs Comfort, the ZCDWLR directs more heating or cooling to the upstairs zone and less to the downstairs zone, and is ideal for homes with an upstairs home office or theater room.

 Reduces the wasted energy used to heat or cool the unoccupied downstairs zone and saves energy by enabling you to adjust your heating and cooling set to temperatures to more energy saving settings without sacrificing comfort.



Press the **COMFORT** key until only ZONE2 airflow is displayed. The selection is saved when the backlight turns off.




When Upstairs Comfort is selected, only Zone2 airflow is displayed and Auto Comfort indicates Off. Airflow can be adjusted at any time by pressing the  or  key.

Nighttime Comfort

The nighttime comfort option, Auto Sleep, saves energy and improves comfort at night and is ideal for homes where all of the bedrooms are located upstairs. Each night, the ZCDWLR automatically directs 30% more heating or cooling to the upstairs zone and 30% less to the unoccupied downstairs zone. In the morning, the ZCDWLR returns to the Comfort option previously selected.

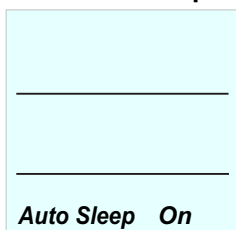
Default settings for Auto Sleep:


- Defaults to Off. Access the Auto Sleep options to turn the option On.
- 8 Hour Timer Operation- Changed by accessing the Auto Sleep options.
- 130% Airflow to Zone2 - Can be changed anytime during Auto Sleep operation or by accessing the Auto Sleep options.

 Auto Sleep reduces the wasted energy used to heat or cool the unoccupied downstairs zone and saves energy by enabling you to adjust your heating and cooling set to temperatures to more energy saving settings without sacrificing comfort.

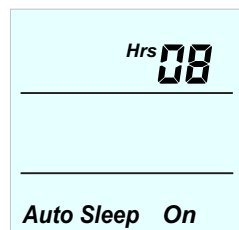
1. Turn Auto Sleep Option On and Set Options if Desired



Turn Auto Sleep On



Press the **MENU** key to display AutoSleep. Press the  key to turn AutoSleep On. Press the **MENU** key to go to Timer Hours for Auto Sleep.

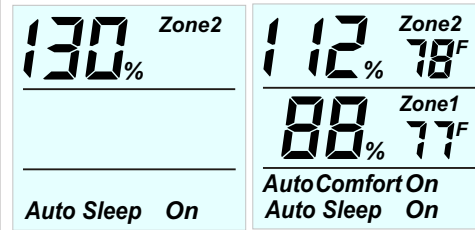
Set the Timer Hours





The default number of hours is 8 hours. To adjust, press the  or  key.

Press the **MENU** key to go to Airflow Settings for Auto Sleep.

Adjust the Airflow Setting

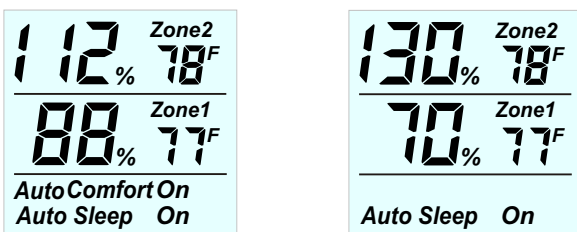


The default airflow is 130%. To adjust, press the  or  key.



The settings are saved when the backlight turns off. Auto Sleep On is now displayed.

2. Set Nightly Start Time (First Auto Sleep Operation)

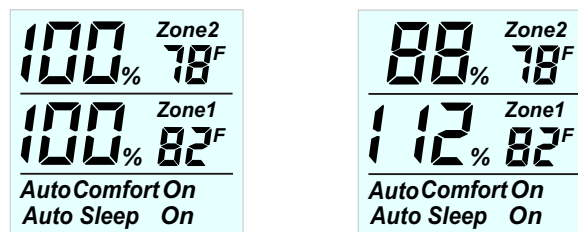
Set Nightly Start Time



For the first operation only, the nightly start time needs to be set. At your desired nightly start time, press and hold the **SLEEP** key until the Auto Sleep airflow settings are displayed. Each night at this time, the ZCDWLR will automatically switch to Nighttime Comfort operation.


If desired, adjust the airflow by pressing the  or  key. The setting is saved and becomes your default airflow at night.

Operation when Auto Sleep Ends



In the morning when the timer operation ends, the ZCDWLR automatically returns to the previous Comfort selection. If Automatic Uniform Comfort was previously selected, the airflow returns to 100% in both Zone1 and Zone2, but within 2 minutes an appropriate adjustment to airflow will automatically be made.



Quick Tips

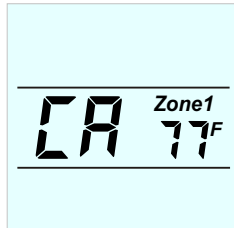
- To set a new nightly start time for Auto Sleep, simply press the **SLEEP** key at the desired start time.
- To end Auto Sleep operation and return to the previous Comfort selection, press the **COMFORT** key.
- Following a power outage, the nightly start time for Auto Sleep needs to be reset. Simply press the **SLEEP** key at the desired start time.
- To turn the Auto Sleep option Off, press the **MENU** key to display AutoSleep then press the  key to display AutoSleep Off.

Additional Homeowner Options

Calibrate Zone 1 Temperature



This option enables you to calibrate the Zone 1 temperature to a temperature that you feel is more correct or to align with the temperature displayed on your thermostat.

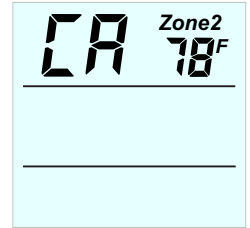
Press the **MENU** key until CA Zone1 is displayed. Press the  or  key to adjust the temperature. The setting is saved when the backlight turns off.



Calibrate Zone 2 Temperature


This option enables you to calibrate the Zone 2 temperature to a temperature that you feel is more correct or to align with your thermostat's remote sensor (if installed).


Press the **MENU** key until CA Zone2 is displayed. Press the  or  key to adjust the temperature. The setting is saved when the backlight turns off.



Smart Thermostat w/ Remote Sensor

The ZCDWLR 2-Zone Comfort Control optimizes the comfort features in smart thermostats with remote sensors while adding valuable energy savings.

 At night, use the thermostat's remote sensor located upstairs in the bedroom space to control the heating and cooling calls. The Nighttime Comfort option directs more heating and cooling upstairs and satisfies the heating or cooling call sooner, saving energy and optimizing comfort.

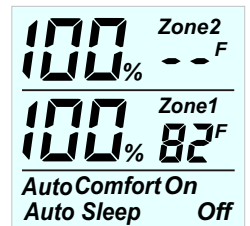
 When Upstairs Comfort is selected, use the thermostat's remote sensor located upstairs to control the heating and cooling calls. More heating and cooling is directed upstairs, satisfying the heating or cooling call sooner, saving energy and optimizing comfort.

Troubleshooting

Sensor Error

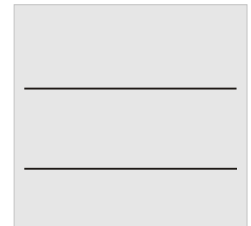
When there is an error with the temperature sensor, the ZCDWLR displays the temperature as dashes. A technician should check for open wires or shorts.

Until the error is corrected, the ZCDWLR will open both dampers and disable Automatic Uniform Comfort. Upstairs Comfort and Downstairs Comfort will function normally.



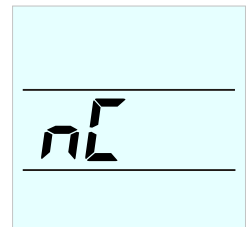
Blank Screen

The ZCDWLR is powered by either the thermostat or the equipment. A blank display indicates that the ZCDWLR is not receiving power. A technician should verify that the thermostat and equipment are powered, as well as check for open wires or shorts.



Loss of Wireless Communication

nC is displayed when the ZCDWLR control attempts to communicate with the DC3 Damper Control and is unsuccessful after three attempts. A technician needs to check that the DC3 Damper Control is powered.



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