eControls

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.

Homeowner How To Video
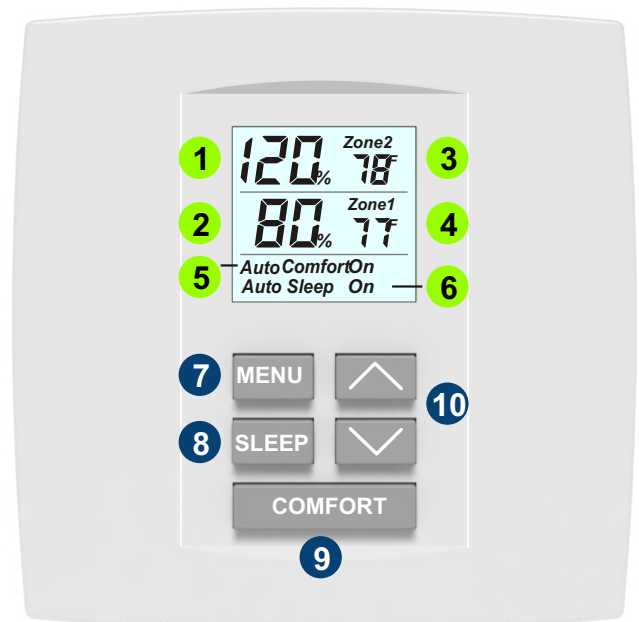
Understanding Your Installation

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 Nightime 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
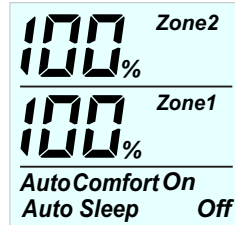
Comfort Control

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 $\boxed{\textbf{COMFORT}}$ key cycles through the comfort options.
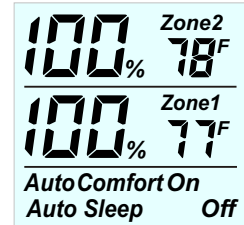
Automatic Uniform Comfort

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.

| 100% Zone2 |
| 100% Zone1 |
| AutoComfort On |
| Auto Sleep Off |

Press the $\boxed{\textbf{COMFORT}}$ key until both ZONE1 airflow and ZONE2 airflow are displayed. The selection is saved when the backlight turns off.

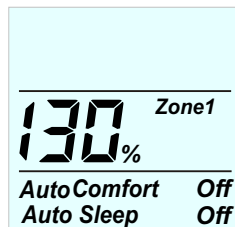| 100% Zone2 78F |
| 100% Zone1 77F |
| AutoComfort On |
| Auto Sleep Off |

When Uniform Comfort is selected, the Zone1 airflow and Zone2 airflow are displayed, Auto Comfort indicates On and the $\boxed{\triangle}$ / $\boxed{\triangledown}$ keys are disabled.
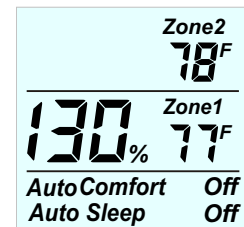
Downstairs Comfort Focus

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.

| 130% Zone1 |
| AutoComfort Off |
| Auto Sleep Off |

Press the $\boxed{\textbf{COMFORT}}$ key until only ZONE1 airflow is displayed. The selection is saved when the backlight turns off.

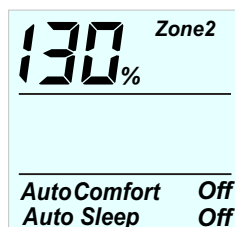| Zone2 78F |
| 130% Zone1 77F |
| AutoComfort Off |
| Auto Sleep Off |

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 $\boxed{\triangle}$ or $\boxed{\triangledown}$ key.
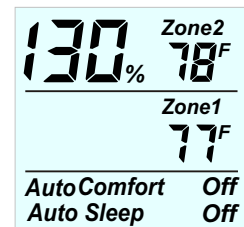
Upstairs Comfort Focus

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.

| 130% Zone2 |
| AutoComfort Off |
| Auto Sleep Off |

Press the $\boxed{\textbf{COMFORT}}$ key until only ZONE2 airflow is displayed. The selection is saved when the backlight turns off.

| 130% Zone2 78F |
| Zone1 77F |
| AutoComfort Off |
| Auto Sleep 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 $\boxed{\triangle}$ or $\boxed{\triangledown}$ 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.
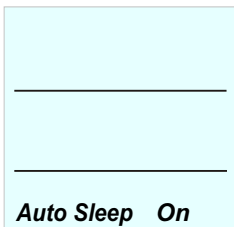
Default settings for Auto Sleep:

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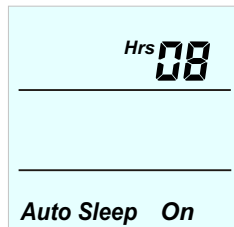
1. Turn Auto Sleep Option On and Set Options if Desired

Turn Auto Sleep On

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.
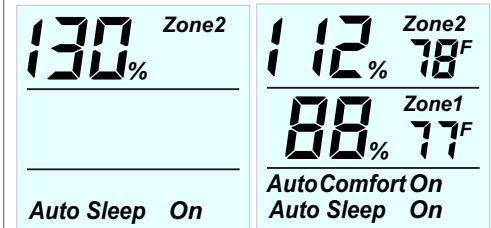
Set the Timer Hours

Hrs 08

Auto Sleep   On

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

130% Zone2

112% 78F Zone2
88% 77F Zone1
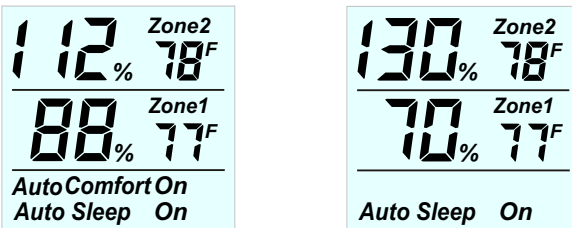*Auto Comfort On*
Auto Sleep   On

Auto Sleep   On

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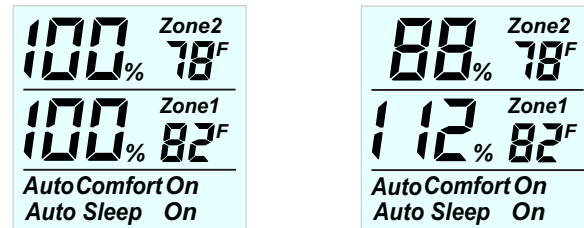
2. Set Nightly Start Time (First Auto Sleep Operation)

Set Nightly Start Time

112% 78F Zone2
88% 77F Zone1
Auto Comfort On
Auto Sleep   On

130% 78F Zone2
70% 77F Zone1
Auto Sleep   On

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

100% 78F Zone2
100% 82F Zone1
Auto Comfort On
Auto Sleep   On

88% 78F Zone2
112% 82F Zone1
Auto Comfort On
Auto Sleep   On

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

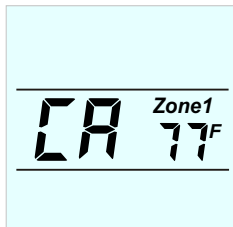- To set a new nightly start time for Auto Sleep, simply press the SLEEP key at the desired start time.
- To end Auto Sleep operation and return to the previous Comfort selection, press the COMFORT key.
- Following a power outage, the nightly start time for Auto Sleep needs to be reset. Simply press 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.
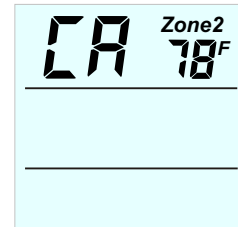
Press the **MENU** key until CA Zone1 is displayed. Press the △ or ▽ key to adjust the temperature. The setting is saved when the backlight turns off.

```
              Zone1
CA    77ᶠ
```

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.

```
              Zone2
CA    78ᶠ
```

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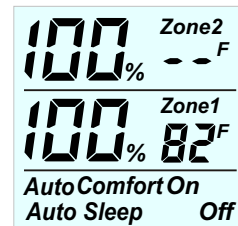
🌿 When Upstairs Comfort is selected, use the thermostat's remote sensor located upstairs to control the heating and cooling calls. More heating and cooling is directed upstairs, satisfying the heating or cooling call sooner, saving energy and optimizing comfort.
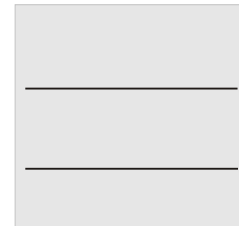
Troubleshooting

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.
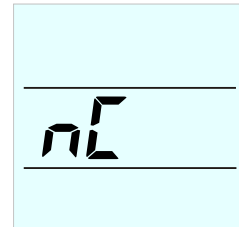
```
              Zone2
100%    - -ᶠ
              Zone1
100%    82ᶠ
Auto Comfort On
Auto Sleep      Off
```

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.

```
nC
```