

Model ZCDWLR

2-Zone Automatic Comfort Control

eControls

For Residential New Construction



The ZCDWLR 2-Zone Comfort Control automatically controls the distribution of heating and cooling to provide a uniformly comfortable home.

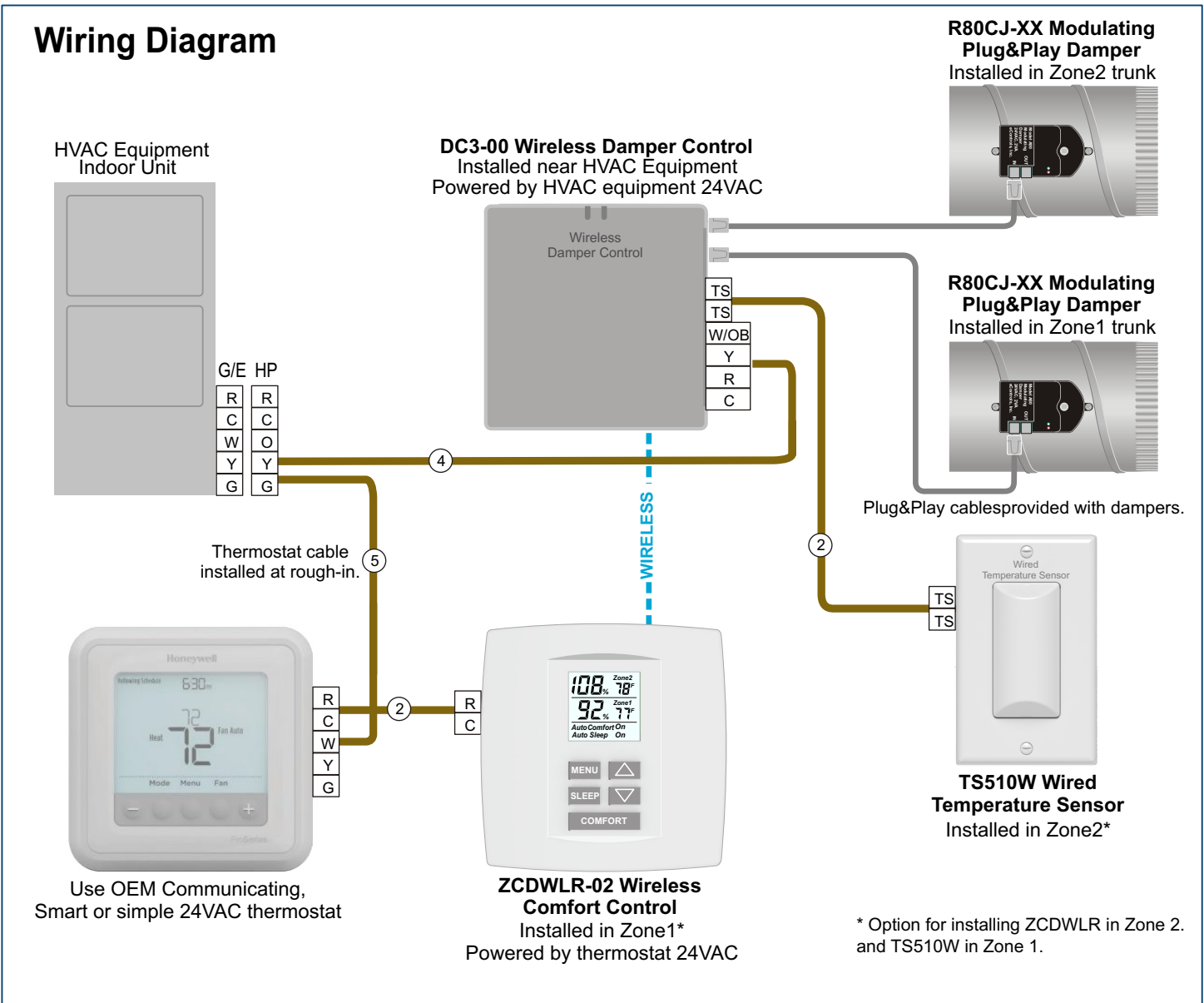
- ▶ Eliminates Bypass.
- ▶ Eliminates DAT sensor and separate 24VAC transformer.
- ▶ About half the material cost of zoning.
- ▶ About half the installation time of zoning.
- ▶ Works with OEM Communicating Thermostats, Smart Thermostats and simple 24VAC Thermostats.



Proudly designed, engineered
and assembled in the USA



Wiring Diagram



Installation

Typical installation includes two round R80CJ or rectangular RT80CJ Modulating Plug&Play Dampers installed in the trunks feeding the upstairs and downstairs zones.

The DC3 Wireless Damper Control is installed near the equipment and wires to gas/electric equipment terminals R, C, Y and W or heat pump equipment terminals R, C, Y and O/B for 24VAC power and to monitor the equipment for heating and cooling calls. The dampers connect to the DC3 using the included plug&play cables.

The low cost TS510W wired temperature sensor is installed in the upstairs zone and wires to the DC3.

The ZCDWLR Wireless 2-Zone Control is installed in the downstairs zone and is powered by 24VAC by either wiring to the R and C terminals at the thermostat or at the equipment. The ZCDWLR is compatible with simple, Smart and OEM thermostats. Alternately, the ZCDWLR can be installed in the upstairs zone and the sensor installed in the downstairs zone.

How It Works

The ZCDWLR monitors the equipment for heating and cooling calls and monitors the downstairs temperature at its location and the upstairs temperature at the sensor.

If the upstairs and downstairs temperatures differ by 2 degrees or more, the ZCDWLR automatically distributes 2% more heating or cooling to the zone that needs it every 2 minutes.

To distribute more heating or cooling upstairs, the upstairs damper fully opens and the downstairs damper partially closes, forcing more heating or cooling to the upstairs zone. To distribute more heating or cooling downstairs, the downstairs damper fully opens and the upstairs damper partially closes, forcing more heating or cooling to the downstairs zone.

The ZCDWLR system dynamically adjusts the dampers to find the right distribution of heating and cooling to provide a comfortable home and save energy in every season.

* Option for installing ZCDWLR in Zone 2. and TS510W in Zone 1.

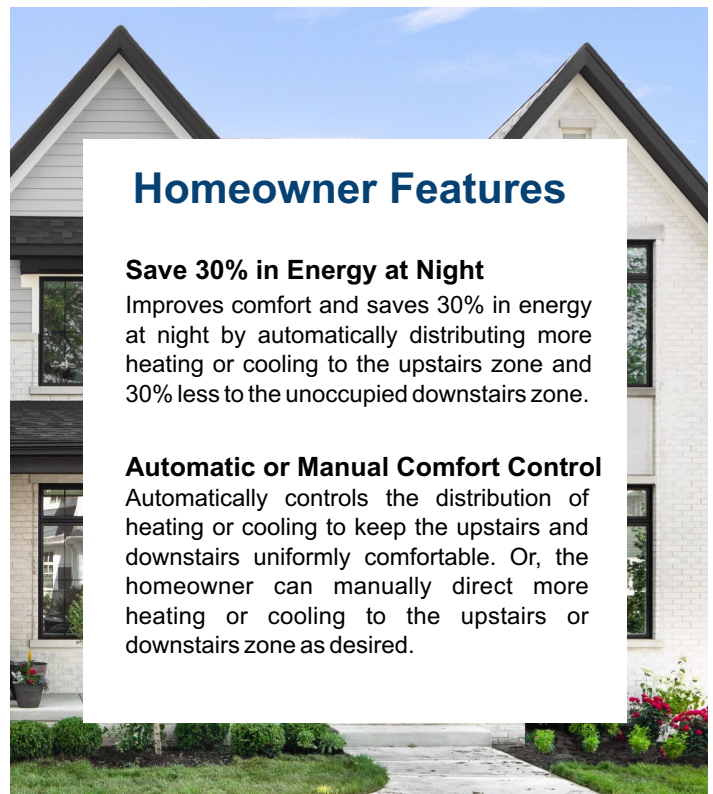
Comparison to Zoning

	ZCDWLR Control	Traditional Zoning
Install Bypass Duct and Damper	Not Required. Modulating dampers never close.	May be required or in-zone bypass damper may be used.
Bypass Calibration and Test	Not Required.	Requires testing and setting of bypass.
Install Damper Control or Zoning Panel	Install Damper Control. Connect 6 wires and 2 plug&play cables.	Install Zoning Panel. Connect 23-25 wires.
Line Voltage Wiring	Not Required. Uses equipment 24VAC.	Required for 24VAC transformer.
Install 24VAC Transformer and Box	Not Required. Uses equipment 24VAC.	Required.
Install and wire DAT sensor in plenum	Not Required. Discharge air temperature is not affected by modulating zoning.	Required.
Wire Dampers	Not Required. Plug&Play	Required.
Install Thermostat Downstairs	Required.	Required.
Install 2-Zone Wall Control Downstairs	Required. Wire to R and C at thermostat.	Not Required.
Install Thermostat Upstairs	Required. Connect 2 wires.	Required. Connect 5 wires.
HERS Testing	Only 1 HERS test required.	Requires three airflow tests - Each zone open, closed and both zones open.



Easiest to Install 2-Zone System Available

- ▶ No Bypass to Install
- ▶ No Bypass to Calibrate and Test
- ▶ Only 8 Wires to Connect vs. 23-25 Wires
- ▶ No DAT Sensor to Install
- ▶ No 24VAC Transformer to Install
- ▶ Only 1 HERS Test vs. 3 Tests
- ▶ Works with Any 24VAC Thermostat



Homeowner Features

Save 30% in Energy at Night
Improves comfort and saves 30% in energy at night by automatically distributing more heating or cooling to the upstairs zone and 30% less to the unoccupied downstairs zone.

Automatic or Manual Comfort Control
Automatically controls the distribution of heating or cooling to keep the upstairs and downstairs uniformly comfortable. Or, the homeowner can manually direct more heating or cooling to the upstairs or downstairs zone as desired.

Ordering Information

ZCDWLR-K1

**2-Zone Automatic Comfort Control Kit
Wired Single Sensor. Powered by 24VAC.**

Kit Includes ZCDWLR-02 2-Zone Wireless Control, DC3-00 Wireless Damper Control and one TS510W Wired Temperature Sensor.



ZCDWLR-02



DC3-00



TS510W

ZCDWLR-K2

**2-Zone Automatic Comfort Control Kit
Wired Dual Sensors. Powered by 24VAC.**

Kit Includes ZCDWLR-02 2-Zone Wireless Control, DC3-00 Wireless Damper Control and two TS520W Wired Temperature Sensors.



ZCDWLR-02



DC3-00



TS520W



TS520W

R80CJ-XX

Round, Modulating, Plug&Play Damper. Includes 25' plug&play cable. Available in 6-20 inch diameters.



RT80CJ-HHxDD

Rectangular, Modulating, Plug&Play Damper. Includes 25' plug&play cable. Available in 8 x 8 thru 16 x 20 in 2 inch increments. Actuator on HH, first dimension side.



Other Zoning Products



ZTWD11, ZTWD21 and ZTWD21WF

Thermostat with integrated equipment and 2-Zone automatic comfort control. Eliminates bypass, DAT sensor and separate 24VAC transformer.



ZCMWL

2-Zone manual comfort control. Eliminates bypass, DAT sensor and separate 24VAC transformer.



Pro322PD

Low cost 3-Zone panel with automatic bypass control, on-panel display and cloning feature. For gas/electric or heat pump equipment w/ 2H/2C.

Where to Purchase

Available through distribution.

Contact Information:

949-916-0945

Sales@eControlsUSA.com

Visit eControlsUSA.com to see other 2-Zone Comfort Controls and Zone Panel solutions.

Limited 5-Year Warranty

The 5-year warranty is limited to the repair or replacement of defective product due to parts failure or defective workmanship.

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