



## User Manual for 1/2/4 Zone Decoders

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Water on Demand<sup>®</sup> 2-Wire Irrigation Accessory

Part Number: **ACC-DCR-001**

**ACC-DCR-002**

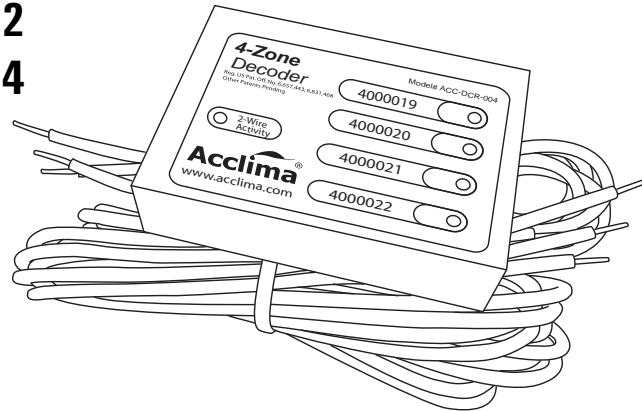
**ACC-DCR-004**

**Acclima, Inc.**

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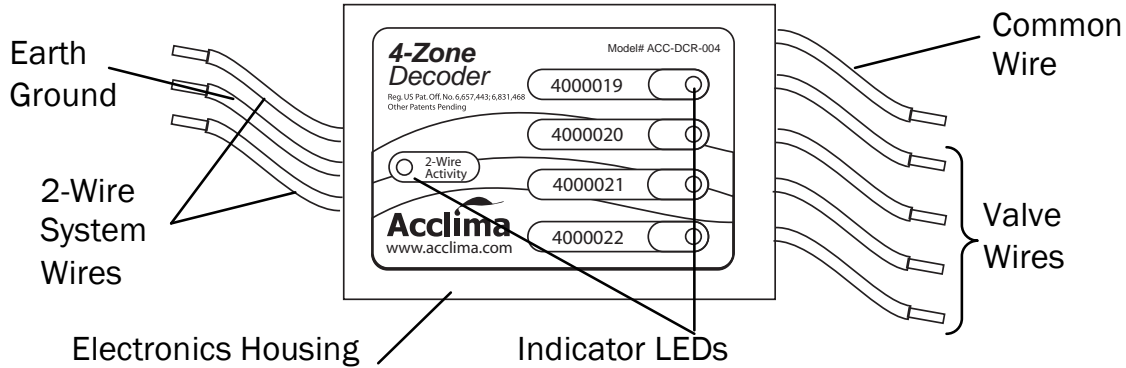
### Overview

The Acclima 1/2/4 Zone Decoder enables communication over a 2-wire path between the Acclima CS3500 controller and one to four solenoid valves. The device's electronics are housed within a waterproof epoxy filled case. 1/2/4 Zone Decoders are designed to be installed in a valve box with the valves and can operate while completely submerged in water.

The 1/2/4 Zone Decoder includes robust lightning protection. Proper installation and connection to a ground rod is essential to protect the 2-Wire system from high electrical surges. Please review and follow properly all installations instructions.

# Decoder Components

1/2/4 Zone Decoders are comprised of the following parts:



## 1. Earth Ground

The green wire should be connected to earth ground using an 8' copper ground rod. Your controller should be grounded using a similar 8' ground rod. Use a Paige Electric Cadweld Connector, or equivalent, for connect the green ground wire to the ground rod.

**NOTE:** This product is designed to function with a well grounded controller. The controller must be grounded to its own ground rod.

**2. Common Wire** - The white common wire connects to the common wires on the valves.

**3. Valve Wires** - Each valve has its own valve wire. The valve wire's serial numbers are clearly indicated on the label. The serial number for each valve is the system address for each individual valve and is needed for programming the controller.

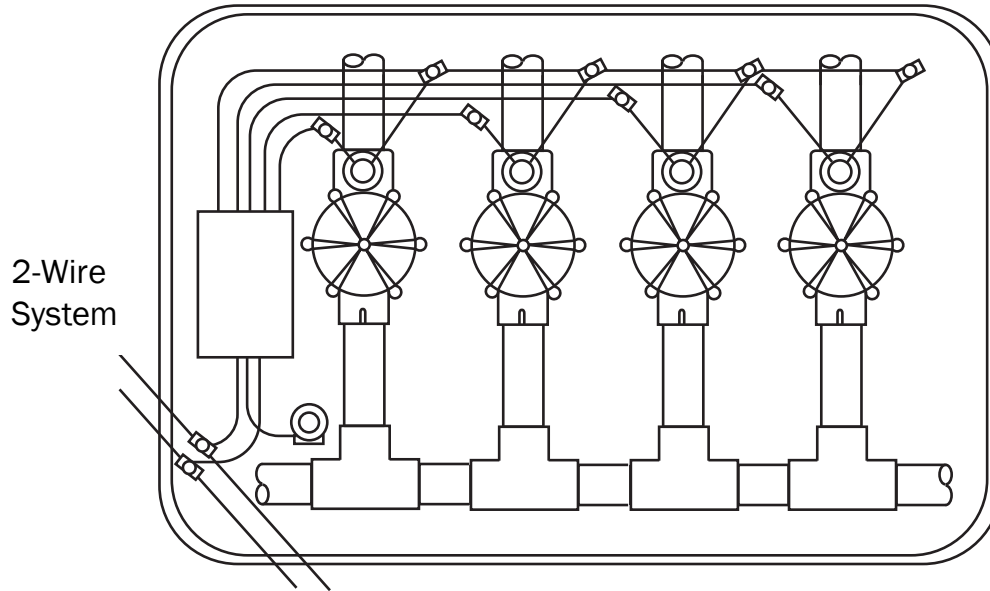
**4. Indicator LEDs** - Each valve has an indicator LED. The indicator will turn on as the valve turns on. The 2-Wire Activity indicator flashes periodically indicating activity along the 2-wire path.

**5. Electronics Housing** - The complex electronics within the 1/2/4 Zone Decoder are housed in a waterproof epoxy filled case. The housing is virtually indestructible and is designed for installation in a valve box. The adapter will still function while completely submerged in.

**6. 2-Wire System Wires** - The red and white wires connect to the 2-Wire path.

## Installation

The 1/2/4 Zone Decoder are installed in the valve box and connected to the solenoid valves using grease caps or DBY connectors.



## Troubleshooting

Symptom	Problem	Solution
Valve not watering	No communication	Check wiring connections 2-Wire indicator light on decoder will blink approximately every 60 seconds.
	Overloaded decoder	Check current load on decoder Inrush max: 2A Steady state max: 1A Check error logs: short circuit Decoder will not operate if current exceeds specified limits.
	Faulty solenoid valve	Replace solenoid valve

## Limited Product Warranty

Your Acclima decoder is warranted for two years from date of purchase to be free of defective materials and workmanship, provided it is used within the working specifications for which the product was designed and under normal use and service. Unless installed by an authorized Acclima trained

technician, Acclima assumes no responsibility for installation. Acclima also assumes no responsibility for removal or unauthorized repair. Acclima's liability under this warranty is limited solely to replacement or repair of defective parts, and Acclima will not be liable for any crop or other consequential damages resulting from any defects in design or breach of warranty. **THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES** and of all other obligations or liabilities of manufacturer. No agent, employee or representative of the manufacturer has authority to waive, alter or add to the provisions of warranty, nor to make representations or warranty not contained herein.

Should you have any claim under this warranty, please contact Acclima's warranty desk by calling toll free 866-887-1470 for prompt assistance.



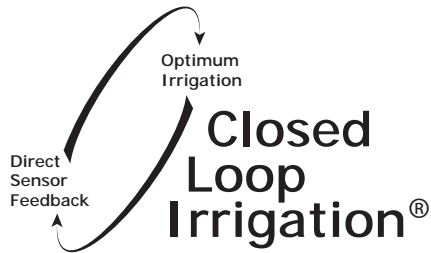
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User Manual for 1/2/4 Zone Decoder 8/4/2011 Rev 3 P/N: T013-036