

VEVOR EHW0104C-DR

VEVOR RDWC Hydroponics Grow System (4 Buckets + 1 Reservoir) Instruction Manual

Model: EHW0104C-DR

1. INTRODUCTION

The VEVOR Recirculating Deep Water Culture (RDWC) Hydroponics Grow System is designed for efficient, soil-free plant cultivation. This kit includes 4 planting buckets and 1 central reservoir, providing an optimal environment for rapid root growth and healthy plant development. The system utilizes a top drip irrigation method and continuous oxygenation to ensure balanced nutrient delivery and pH/EC levels throughout.



Image 1: VEVOR RDWC Hydroponics Grow System overview, highlighting 4 buckets + 1 reservoir configuration and dimensions.

2. COMPONENTS LIST

Your VEVOR RDWC Hydroponics Grow System includes the following components:

- 4 x Planting Buckets (5 Gallons / 20 Liters each)
- 1 x Reservoir Bucket
- 4 x Planting Baskets (8-inch large capacity)
- 4 x Bags of Expanded Clay Pebbles
- 1 x Air Pump (4x4 L/min powerful air output, Noise <50dB)
- 4 x Air Stones
- 1 x Water Pump (800L)
- 1 x Black Air Feed Hose (12 m)
- 1 x Black Water Supply Hose (1.5 m)
- 4 x Drip Irrigation Tubes

- 4 x Inline Check Valves
- 10 x Sealing Rings
- 1 x Red Floating Ball (for water level indicator)
- 1 x T-Connector
- 1 x X-Connector
- 1 x Water Filter
- 4 x Drainage Valves with Washers
- 1 x PVC Pipe Valve-811
- 1 x AC Adapter
- 1 x End Cap (8x11)
- 1 x Water Level Tubes



Image 2: Comprehensive view of all included hydroponic system accessories.



Image 3: Detailed component breakdown with specifications for Model EHW0104C-DR.

3. SETUP INSTRUCTIONS

Follow these steps to assemble and set up your VEVOR RDWC Hydroponics Grow System:

1. **Prepare Buckets:** Ensure all 4 planting buckets and the 1 reservoir bucket are clean. Install the sealing rings and water level tubes into the designated holes on each bucket. The pre-cut water level tubes ensure consistent length and prevent leaks.
2. **Connect Plumbing:** Connect the black water supply hose and air feed hose to the water pump, air pump, and between the buckets using the T-connectors, X-connectors, and drainage valves. Ensure all connections are secure and leak-proof. The system includes check valves to prevent backflow.
3. **Install Air Stones:** Attach an air stone to the end of each air feed hose and place them at the bottom of each planting bucket and the reservoir.
4. **Place Planting Baskets:** Insert the 8-inch large capacity planting baskets into the top opening of each planting bucket.
5. **Add Clay Pebbles:** Fill each planting basket with the expanded clay pebbles. These provide support for your plants and allow for quick drainage.
6. **Add Nutrient Water:** Fill the reservoir and planting buckets with nutrient-rich water. Ensure the water level is just below the bottom of the planting baskets. The floating red ball in the water level tube will indicate the current water level.
7. **Transplant Seedlings:** Carefully transplant your seedlings into the clay pebbles within the planting baskets. Ensure the roots extend into the water below.
8. **Power On:** Plug in the air pump and water pump. The air pump will oxygenate the water via the air stones, and the water pump will circulate the nutrient solution through the top drip irrigation system.



Image 4: Step-by-step visual guide for initial setup.

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Video 1: Overview of the VEVOR RDWC Hydroponics Grow System components and initial setup.

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Video 2: Detailed unboxing and assembly guide for the VEVOR Hydroponics System.

4. OPERATING INSTRUCTIONS

The VEVOR RDWC system operates by continuously recirculating an oxygenated nutrient solution to your plants. This method promotes faster growth and higher yields.

- **Nutrient Circulation:** The water pump draws nutrient solution from the reservoir and delivers it to each planting bucket via the top drip irrigation system. The solution then drains back into the reservoir, creating a continuous cycle.
- **Oxygenation:** The air pump and air stones provide a constant supply of oxygen to the nutrient solution in both the reservoir and planting buckets. This high-oxygen environment is crucial for healthy root development and nutrient absorption.
- **Water Level Monitoring:** Use the external water level tubes with floating red balls to easily monitor the solution level in each bucket. Refill the reservoir as needed to maintain optimal levels.
- **Nutrient Management:** Regularly check and adjust the pH and Electrical Conductivity (EC) levels of your nutrient solution. Maintaining stable pH and EC is vital for plant health and nutrient uptake.



Image 5: Key operational components for optimal plant growth.

RECIRCULATING DEEP WATER CULTURE(RDWC)

More efficient growing technology

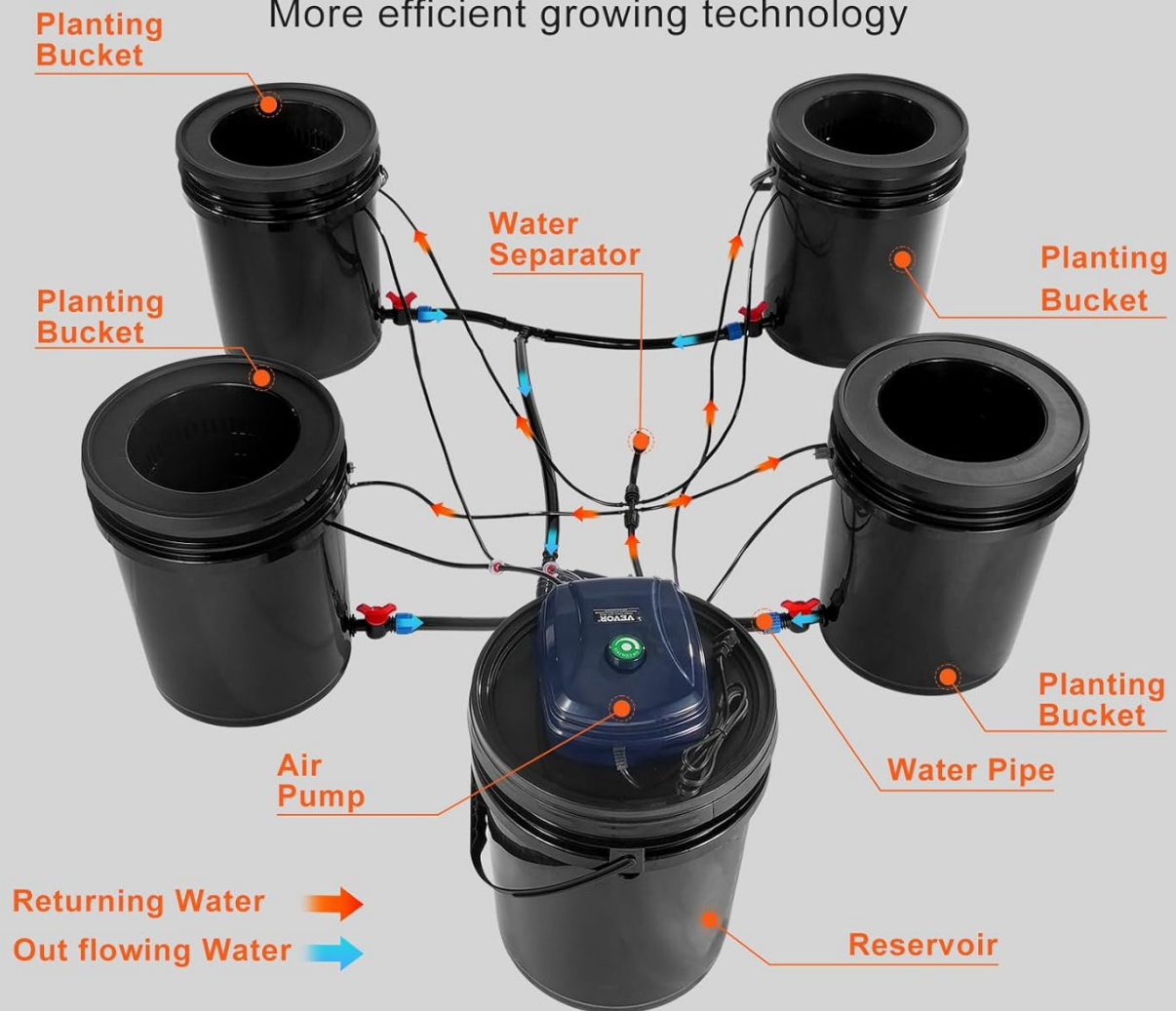


Image 6: Recirculating Deep Water Culture (RDWC) system diagram.

5. MAINTENANCE

Regular maintenance is essential for the longevity and efficiency of your hydroponic system:

- **Nutrient Solution Changes:** Replace the entire nutrient solution every 1-2 weeks, or as recommended by your nutrient manufacturer, to prevent nutrient imbalances and pathogen buildup.
- **pH and EC Monitoring:** Check pH and EC daily and adjust as necessary. Ideal pH for most plants in hydroponics is between 5.5 and 6.5.
- **Cleaning:** Periodically clean the buckets, reservoir, tubing, and air stones to prevent algae growth and mineral buildup. Disassemble components as needed for thorough cleaning.
- **Pump Inspection:** Inspect the air pump and water pump regularly for any blockages or wear. Ensure air stones are producing consistent bubbles.
- **Leak Checks:** Regularly inspect all connections and sealing rings for any signs of leakage. The system's leak-proof design with high-quality valves and sealing rings minimizes this risk.



LEAK-PROOF DESIGN

Precise irrigation without indoor dampness

Circular Drip Irrigation,
Better Moisture
Absorption

Check Valve,
Prevents Water
Backflow

Pre-Cut Water Level
Pipe, Consistent
Length

Sealing Ring,
Prevents Water
Leakage

Image 7: Leak-proof design features for easier maintenance.

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Video 3: User review demonstrating the system in operation and discussing plant growth.

6. TROUBLESHOOTING

If you encounter issues with your VEVOR RDWC Hydroponics Grow System, refer to the following common problems and solutions:

- **Leaking Connections:**

Issue: Water is leaking from tubing connections or bucket seals.

Solution: Ensure all sealing rings are correctly seated and connections are tightened. Verify that check valves are properly installed and not damaged. Apply a small amount of food-grade lubricant (like vegetable oil or silicone grease) to tubing ends to ease insertion and improve seal.

- **Poor Water Circulation:**

Issue: Water is not flowing evenly to all buckets or the pump seems weak.

Solution: Check the water pump for blockages or debris. Ensure all tubing is free of kinks. Verify that the water

filter is clean. Adjust individual flow valves on the drip irrigation tubes if present.

• **Lack of Oxygenation:**

Issue: Plants show signs of root rot or stunted growth, and air bubbles are minimal.

Solution: Inspect the air pump to ensure it is functioning. Clean or replace clogged air stones. Check air hoses for kinks or disconnections. Ensure the air pump is adequately sized for the system.

• **Nutrient Imbalance (Yellowing Leaves, Stunted Growth):**

Issue: Plants exhibit signs of nutrient deficiency or toxicity.

Solution: Test the pH and EC of your nutrient solution. Adjust pH to the optimal range (5.5-6.5) using pH up/down solutions. Adjust EC by adding more nutrients or diluting the solution. Consider a full nutrient solution change if levels are difficult to balance.

7. SPECIFICATIONS

Attribute	Specification
Brand	VEVOR
Model Number	EHW0104C-DR
System Type	Recirculating Deep Water Culture (RDWC) with Top Drip
Number of Buckets	4 Planting Buckets + 1 Reservoir Bucket
Bucket Material	PP (Polypropylene)
Chamber Volume (per bucket)	5 Gallons / 20 Liters
Product Dimensions (per bucket)	11.81"L x 11.81"W x 14.96"H
Item Weight (total system)	24.3 Pounds
Air Pump Output	4x4 L/min
Air Pump Noise Level	<50dB
Water Pump Flow Rate	800L/H

8. WARRANTY AND SUPPORT

VEVOR is committed to providing quality products and support. For technical assistance, warranty information, or to register your product, please visit the official VEVOR support page.

- **Official Support Website:** www.vevor.com/support
- **Return Policy:** Products purchased from Amazon typically have a 30-day refund/replacement policy. Please refer to your Amazon purchase details for specific return window and conditions.

VEVOR aims to empower users with pro-level products at exceptional value, blending purposeful technology with the hands-on joy of creation.

