

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [VEVOR](#) /

› [VEVOR ZC12000 Electric Winch User Manual - 12000 lbs Capacity](#)

VEVOR ZC12000

VEVOR ZC12000 Electric Winch User Manual

12000 lbs Load Capacity, 12V DC Truck Winch with Synthetic Rope

1. INTRODUCTION

This manual provides essential information for the safe operation, installation, maintenance, and troubleshooting of your VEVOR ZC12000 Electric Winch. Please read this manual thoroughly before using the winch to ensure proper function and to prevent injury or damage.

The VEVOR ZC12000 Electric Winch is designed for vehicle recovery and towing applications, offering a 12,000 lbs (5400 kg) pulling capacity with a durable synthetic rope. It features a powerful 12V DC 6.6 HP motor, a 3-stage planetary gear system, and IP67 waterproofing for reliable performance in various conditions.



Image: VEVOR ZC12000 Electric Winch in action, highlighting its key features for emergency recovery.

2. SAFETY INSTRUCTIONS

WARNING: Failure to follow these safety instructions may result in serious injury or death.

- Always wear heavy-duty gloves when handling the winch rope.

- Never operate the winch with less than five wraps of rope around the drum.
- Keep hands and clothing clear of the fairlead and rope drum during operation.
- Do not exceed the rated line pull capacity of the winch.
- Ensure the vehicle's engine is running during winching to maintain battery power.
- Inspect the winch, rope, and accessories for damage before each use.
- Never use the winch to lift people or for overhead lifting.
- Always use a tree saver strap or anchor point that can withstand the pulling force.
- Clear the area of bystanders before and during winching operations.
- Do not operate the winch if the rope is frayed, kinked, or damaged.
- Avoid prolonged continuous operation to prevent motor overheating. Allow the motor to cool down between pulls.
- Always disengage the clutch when free-spooling the rope.
- When re-spooling, ensure the rope is wound evenly and under light tension.

3. PACKAGE CONTENTS

Verify that all items are present in the package before beginning installation.

- 1 x VEVOR ZC12000 Electric Winch
- 1 x 3/8 Clevis Hook
- 1 x Control Box (with cable set)
- 1 x Fairlead
- 1 x Negative Power Cable (1.8 m)
- 1 x Pack of Mounting Bolts
- 1 x Red Strap
- 1 x User Manual (this document)
- 1 x Wired Remote Control
- 1 x Wireless Remote Control
- 2 x Mounting Hooks



Item Model Number: **ZC12000**

Rated Line Pull: **12000 lbs / 5400 kg**

Control Modes: **Wireless & Wired Remote Control**

Rope Specification: **Synthetic Rope**

Diameter: **Φ3/8 in / 9.5 mm**; Length: **92 ft / 28 m**

Motor Specification: **12V DC, 6.6 HP Pure Copper Motor**

Gear Ratio: **218.4:1**

Main Materials: **Aluminum Alloy, Steel, Plastic**

IP Rating: **IP67**

Net Weight: **54.2 lbs / 24.6 kg**

Item Dimensions:

21.3 × 6.7 × 10.6 in / 540 × 170 × 270 mm

(with Control Box)

Accessories:

1 x User Manual

**1 x Control Box
(with cable set)**

1 x Wireless Remote

1 x Wired Remote

1 x Fairlead

1 × 3/8 Clevis Hook

**1 x Negative Power
Cable (1.8 m)**

1 x Pack of Mounting Bolts

Image: Winch dimensions and included accessories.

4. SPECIFICATIONS

Feature	Specification
Model Number	ZC12000
Rated Line Pull	12000 lbs / 5400 kg
Motor Specification	12V DC, 6.6 HP Pure Copper Motor

Feature	Specification
Gear Ratio	218.4:1 (3-Stage Planetary Gear)
Rope Type	Synthetic Rope (12-strand polyethylene)
Rope Diameter	Φ3/8 in / 9.5 mm
Rope Length	92 ft / 28 m
Control Modes	Wireless & Wired Remote Control
Wireless Remote Range	59 ft / 18 m
Wired Remote Cable Length	9.8 ft / 3 m
IP Rating	IP67 (Dust and Water-resistant)
Main Materials	Aluminum Alloy, Steel, Plastic
Net Weight	54.2 lbs / 24.6 kg
Product Dimensions (with Control Box)	21.3 x 6.7 x 10.6 in / 540 x 170 x 270 mm
Mounting Hole Diameter	Φ0.41 in / 10.5 mm
Mounting Hole Spacing 1	10 in / 254 mm
Mounting Hole Spacing 2	4.5 in / 114.3 mm

Item Model Number: **ZC12000**
Rated Line Pull: **12000 lbs / 5400 kg**
Control Modes: **Wireless & Wired Remote Control**
Rope Specification: **Synthetic Rope**
Diameter: **Φ3/8 in / 9.5 mm**; Length: **92 ft / 28 m**
Motor Specification: **12V DC, 6.6 HP Pure Copper Motor**
Gear Ratio: **218.4:1**
Main Materials: **Aluminum Alloy, Steel, Plastic**
IP Rating: **IP67**
Net Weight: **54.2 lbs / 24.6 kg**
Item Dimensions:
21.3 x 6.7 x 10.6 in / 540 x 170 x 270 mm (with Control Box)
Mounting Size: **Φ0.41 in / 10.5 mm (Hole Diameter),**
10 in / 254 mm (Hole Spacing 1), 4.5 in / 114.3 mm (Hole Spacing 2)
Accessories: **1 x User Manual, 1 x Control Box (with cable set)**
1 x Wireless Remote, 1 x Wired Remote, 1 x Fairlead
1 x 3/8 Clevis Hook, 1 x Negative Power Cable (1.8 m)
1 x Pack of Mounting Bolts



Image: Detailed dimensions and mounting specifications.

5. SETUP AND INSTALLATION

Proper installation is crucial for the safe and effective operation of your winch. If you are unsure about any steps, consult a qualified professional.

5.1 Mounting the Winch

1. Choose a suitable mounting location on your vehicle, typically a winch bumper or mounting plate, that can support the winch's weight and pulling forces.
2. Ensure the mounting surface is flat and strong enough to prevent flexing under load.

3. Align the winch with the pre-drilled holes on your mounting surface, using the provided mounting bolts. Refer to the specifications for mounting hole dimensions.
4. Securely fasten the winch using all provided hardware. Do not overtighten.

5.2 Electrical Connections

CAUTION: Disconnect the vehicle's battery before making any electrical connections to prevent short circuits.

1. Mount the control box in a secure location, away from moving parts and excessive heat.
2. Connect the motor cables from the winch to the corresponding terminals on the control box. Ensure correct polarity (usually color-coded).
3. Connect the main power cables from the control box to the vehicle's battery. The positive (+) cable (red) connects to the positive battery terminal, and the negative (-) cable (black, provided) connects to the negative battery terminal.
4. Ensure all connections are tight and insulated to prevent corrosion and short circuits.

5.3 Fairlead Installation

Install the fairlead to the winch mounting plate, ensuring the rope passes smoothly through it without obstruction. The fairlead guides the rope and protects it from abrasion.



Image: VEVOR ZC12000 Electric Winch properly installed on a vehicle.

6. OPERATING INSTRUCTIONS

Familiarize yourself with the winch controls and proper winching techniques before attempting a recovery.

6.1 Pre-Winching Checks

- Ensure the vehicle is securely anchored.
- Check the winch rope for any damage or kinks.
- Confirm the clutch is engaged (if free-spooling was used).
- Clear the area of all personnel and obstacles.

6.2 Extending the Rope

1. Disengage the clutch lever to allow free-spooling of the rope.
2. Pull the rope manually towards the anchor point.
3. Attach the clevis hook securely to a tree saver strap or other appropriate anchor point.
4. Ensure at least five wraps of rope remain on the winch drum.

5. Engage the clutch lever fully.

6.3 Winching Operation

The winch can be operated using either the wired or wireless remote control.

- **Wired Remote:** Connect the wired remote to the control box. Press the "IN" button to retract the rope and "OUT" to extend it.
- **Wireless Remote:** Ensure the wireless remote has fresh batteries. Press the "IN" button to retract the rope and "OUT" to extend it. The wireless remote offers a range of up to 59 ft (18 m), allowing you to stand at a safe distance.

During winching:

- Operate the winch in short bursts to prevent overheating.
- Monitor the rope for even winding on the drum.
- Observe the red warning zone on the rope, which indicates the last five wraps and signals that you are approaching the end of the safe operating length.
- The load-holding brake system will automatically lock to prevent rollback when the motor is not engaged.

Steep Slope Rescue, No Worries



Wired Backup
9.8 ft / 3 m
Operation

+



Wireless Control
59 ft / 18 m
Range

Image: Wired and wireless remote controls in use during a vehicle recovery.

Overload Protection Avoids Rope Breakage



Red Warning Zone



Image: Winch drum with synthetic rope and red warning zone for overload protection.

7. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your VEVOR Electric Winch.

- **Rope Inspection:** Regularly inspect the synthetic rope for fraying, cuts, or other damage. Replace the rope if any significant damage is found.
- **Cleaning:** After use, especially in muddy or wet conditions, clean the winch and rope with fresh water. Allow them to dry completely before storage.
- **Electrical Connections:** Periodically check all electrical connections for tightness and corrosion. Clean terminals as needed.
- **Lubrication:** The internal gears are factory-lubricated and generally do not require user maintenance. Refer to a qualified service center for internal lubrication if necessary.
- **Storage:** Store the winch in a dry, protected environment when not in use. Ensure the rope is neatly spooled on the drum.

Never Rusts or Breaks in Sun or Rain



Φ 3/8in x 92ft

UHMW-PE Synthetic Rope

12-Strand Braided

Sunlight-resistant & Fatigue-resistant

Image: Synthetic rope designed for durability in various weather conditions.

8. TROUBLESHOOTING

This section addresses common issues you might encounter with your winch.

Problem	Possible Cause	Solution
Winch does not operate	No power to winch; Loose electrical connections; Faulty remote control; Overload protection activated.	Check battery connections and voltage; Ensure all cables are securely fastened; Test with both wired and wireless remotes; Allow winch to cool down if overheated.

Problem	Possible Cause	Solution
Winch operates slowly or weakly	Low battery voltage; Overload; Corroded electrical connections.	Ensure vehicle engine is running; Reduce load; Clean battery terminals and cable connections.
Rope does not free-spool	Clutch not disengaged; Rope under tension.	Ensure clutch lever is fully disengaged; Release any tension on the rope.
Winch motor overheats	Prolonged continuous operation; Exceeding duty cycle.	Operate in short bursts; Allow motor to cool down between pulls.
Wireless remote not working	Dead batteries; Interference; Remote not paired.	Replace batteries; Move away from sources of interference; Refer to remote pairing instructions (if applicable, usually automatic).

9. WARRANTY AND SUPPORT

For warranty information or technical support, please contact VEVOR customer service through their official website or the retailer where the product was purchased. Keep your purchase receipt as proof of purchase. VEVOR is committed to providing quality products and support. Do not attempt to repair the winch yourself, as this may void the warranty and pose safety risks. Always refer to authorized service personnel for repairs.