

## Alloyman 12vRED

# Alloyman 12V 3/8-inch Cordless Electric Ratchet Wrench Set Instruction Manual

Model: 12vRED

## 1. SAFETY INFORMATION

Read all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

### General Power Tool Safety Warnings:

- **Work Area Safety:** Keep work area clean and well-lit. Cluttered or dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- **Electrical Safety:** Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Personal Safety:** Always wear eye protection. Use appropriate safety equipment such as dust masks, non-skid safety shoes, hard hats, or hearing protection for relevant conditions. Stay alert, watch what you are doing, and use common sense when operating a power tool.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. It will do the job better and safer at the rate for which it was designed. Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.
- **Battery Tool Use and Care:** Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

## 2. PACKAGE CONTENTS

Verify that all items listed below are present and in good condition upon opening the package.

- 1 x Alloyman 3/8-inch Cordless Electric Ratchet Wrench
- 2 x 12V 2.0Ah Power Batteries
- 1 x Battery Charger
- 6 x Sockets (10mm, 12mm, 13mm, 14mm, 15mm, 17mm)
- 1 x 3-inch Extension Rod
- 1 x 1/4-inch Drive Adapter
- 1 x 1/2-inch Drive Adapter
- 1 x User Manual
- 1 x Storage Case

# MULTIPLE DRIVE ADAPTERS & SOCKET SETS

 **40%  
LONGER  
LENGTH**



**3-inch  
EXTENSION BAR**



**3/8 to 1/4-inch  
DRIVE ADAPTER**



**3/8 to 1/2-inch  
DRIVE ADAPTER**



**10, 12, 13, 14, 15, 17mm**



Image: The complete Alloyman 3/8-inch Cordless Electric Ratchet Wrench Set, including the wrench, two batteries, charger, various sockets, and drive adapters, all neatly arranged in its storage case.

## 3. PRODUCT FEATURES

- **Extended Reinforced Alloy Head:** Features a 5.5-inch long neck profile and an ultra-slim 3/8-inch compact head for accessing tight spaces. The head is constructed from steel alloy for enhanced durability and impact resistance.
- **High Torque Output:** Delivers up to 60 ft-lbs (80 Nm) of torque, suitable for tightening and loosening most nuts and bolts.
- **Powerful 12V Motor:** Equipped with a 12V pure copper motor for efficient performance.
- **Variable Speed Trigger:** Allows for precise speed control from 0 to 250 RPM based on trigger pressure.
- **Long-lasting Batteries:** Includes two 12V 2.0Ah rechargeable lithium-ion batteries, designed for extended use and 500 charge cycles.
- **Built-in LED Light:** Illuminates the work area for improved visibility in dark or confined spaces.
- **Battery Power Indicator:** Displays the remaining battery charge level, allowing for timely recharging.
- **Ergonomic Soft Grip:** Designed for comfortable handling and reduced hand fatigue during prolonged use.
- **Forward/Reverse Switch:** Easily switch between tightening and loosening modes.

## MORE DETAILS MORE ASSURANCE



Image: An annotated diagram highlighting key features of the Alloyman Cordless Ratchet Wrench, including the forward/reverse lever, max torque, low profile design, built-in LED light, soft grip, and 12V battery platform.

**MAX TORQUE  
60FT-LBS  
(80 N.M)**



**More power for heavy duty**

Image: The Alloyman Cordless Ratchet Wrench in use, demonstrating its maximum torque capability of 60 ft-lbs (80 N.m) for heavy-duty applications.

# EXTENDED REINFORCED ALLOY HEAD

Easily Access to tight spaces, impact-resistant, and durable



5.5in



Image: Close-up of the Alloyman Cordless Ratchet Wrench's extended reinforced alloy head, measuring 5.5 inches, designed for easy access to tight spaces and enhanced durability.

## 4. SETUP

### 4.1 Charging the Battery

Before first use, fully charge both 12V 2.0Ah batteries. Connect the charger to a standard power outlet and insert the battery pack. The charger indicator light will show the charging status (e.g., red for charging, green for fully charged). Ensure the battery is securely seated in the charger.



Image: The Alloyman 12V 2.0Ah power battery and charger, illustrating the components for recharging the tool's power source.

#### 4.2 Attaching Sockets and Adapters

1. Ensure the ratchet wrench is turned off and the battery is removed before attaching or detaching accessories.
2. Select the appropriate socket size (10mm, 12mm, 13mm, 14mm, 15mm, 17mm) or drive adapter (1/4-inch, 1/2-inch) for your task.
3. Align the square drive of the socket or adapter with the square drive on the ratchet head.
4. Push the socket/adapter firmly onto the drive until it clicks into place, ensuring it is securely fastened.
5. To use the 3-inch extension rod, attach it to the ratchet head first, then attach the desired socket to the extension rod.

# MULTIPLE DRIVE ADAPTERS & SOCKET SETS

 **40%  
LONGER  
LENGTH**



**3-inch  
EXTENSION BAR**



**3/8 to 1/4-inch  
DRIVE ADAPTER**



**3/8 to 1/2-inch  
DRIVE ADAPTER**



**10, 12, 13, 14, 15, 17mm**



Image: The Alloyman Cordless Ratchet Wrench displayed with its included 3-inch extension bar, 3/8 to 1/4-inch drive adapter, 3/8 to 1/2-inch drive adapter, and a set of six sockets (10, 12, 13, 14, 15, 17mm).

## 5. OPERATING INSTRUCTIONS

### 5.1 Installing the Battery

Slide a charged 12V battery pack into the base of the ratchet wrench handle until it locks securely into place. Ensure it is fully seated to prevent accidental disconnection during operation.

### 5.2 Powering On and Off

The tool is activated by pressing the variable speed trigger. Release the trigger to turn the tool off.

### 5.3 Variable Speed Control

The speed of the ratchet wrench is controlled by the amount of pressure applied to the trigger. A lighter press results in lower RPM, while a firmer press increases the speed up to 250 RPM. This allows for precise control depending on the application.

# VARIABLE SPEED TRIGGER 0-250<sub>RPM</sub>



100

Low



200

Middle



250

High

Image: Close-up of the variable speed trigger on the Alloyman Cordless Ratchet Wrench, illustrating how pressure controls the RPM from 0 to 250.

## 5.4 Forward/Reverse Operation

To change the direction of rotation, use the forward/reverse lever located on the head of the ratchet. Push the lever to the left for forward (tightening) and to the right for reverse (loosening). Always ensure the tool has come to a complete stop before changing direction.

# FORWARD REVERSE SWITCH



 **Forward to  
Tighten the Bolts**



 **Reverse to  
Unscrew the Bolts**

Image: A visual guide demonstrating the forward/reverse switch on the Alloyman Cordless Ratchet Wrench, showing how to switch between tightening and unscrewing bolts.

## 5.5 Using the LED Work Light

The built-in LED light automatically illuminates when the trigger is pressed, providing visibility in dimly lit work areas. This feature is particularly useful when working in engine bays or other confined spaces.

# BUILT-IN LED BRIGHT

Ideal For Narrow & Dark Work Spaces



LED LIGHT

EXTENSIVE USE

Image: The Alloyman Cordless Ratchet Wrench in use, with its built-in LED light illuminating a narrow and dark work space, highlighting its utility for improved visibility.

## 5.6 Battery Indicator

The battery indicator lights on the tool provide a visual representation of the remaining battery charge:

- **Green:** 80% - 100% charge
- **Yellow:** 50% - 80% charge
- **Red:** Below 50% charge (recharge soon)

## ENHANCED 5.5-INCH RATCHET HEAD

5.5in

 **40%  
LONGER  
LENGTH**



Image: A close-up of the Alloyman Cordless Ratchet Wrench's battery indicator lights, showing the color-coded system for displaying remaining charge (green for high, yellow for medium, red for low).

## 6. MAINTENANCE

### 6.1 Cleaning

Regularly clean the tool's exterior with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Keep ventilation openings clear of dust and debris to prevent overheating.

### 6.2 Battery Care and Storage

- Store batteries in a cool, dry place away from direct sunlight and extreme temperatures.
- Do not store batteries in a discharged state for extended periods. Recharge them periodically if not in use.
- Protect batteries from physical damage.

### 6.3 General Inspection

Periodically inspect the tool for any signs of damage, loose parts, or wear. If any issues are found, discontinue use and contact customer support for assistance.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Tool does not turn on.	Battery not charged or improperly installed.	Ensure battery is fully charged and correctly inserted. Check battery indicator.
Reduced power or intermittent operation.	Low battery charge. Overload protection activated.	Recharge battery. Reduce load on the tool. Allow tool to cool down if overheated.
Socket/adaptor not holding securely.	Improper installation. Worn drive square.	Ensure socket/adaptor is pushed firmly until it clicks. Inspect drive square for damage.
LED light not working.	Faulty LED.	Contact customer support for repair or replacement.

If the problem persists after attempting these solutions, please contact Alloyman customer support.

## 8. SPECIFICATIONS

Feature	Detail
Brand	Alloyman
Model Number	12vRED
Voltage	12 Volts
Drive Size	3/8 inch
Max Torque	60 ft-lbs (80 N.m)
No-Load Speed	0-250 RPM (Variable)
Head Style	Ratcheting, Extended (5.5 inches)
Material	Metal (Steel Alloy Head)
Item Weight	3.33 Kilograms (approx. 7.34 lbs)
Battery Type	Lithium-Ion
Battery Capacity	2.0Ah (x2 included)

## 9. WARRANTY AND SUPPORT

Alloyman provides a warranty of up to 365 days for this product. If you encounter any issues with your Alloyman 12V 3/8-inch Cordless Electric Ratchet Wrench Set within this period, please contact our customer support team.

For warranty claims, technical assistance, or any other inquiries, please refer to the contact information provided in your product packaging or visit the official Alloyman website.

Please have your model number (12vRED) and purchase details ready when contacting support.

## 10. PRODUCT VIDEO DEMONSTRATION

Your browser does not support the video tag.

Video: An official product demonstration by Alloyman Tool, showcasing the features and operation of the 3/8" Cordless Ratchet Wrench Set. This video illustrates the tool's use in various applications, including tightening and loosening fasteners, and highlights its compact design and power.