

HARDELL DM12502BAGHD-1

HARDELL 4V Cordless Rotary Tool User Manual

MODEL: DM12502BAGHD-1 | BRAND: HARDELL

1. Introduction

Thank you for choosing the HARDELL 4V Cordless Rotary Tool. This versatile tool is designed for a variety of small DIY projects, including sanding, carving, polishing, drilling, cutting, and engraving. Its compact, lightweight design and cordless operation provide flexibility and ease of use for both beginners and experienced users. Please read this manual thoroughly before operating the tool to ensure safe and effective use.

2. Package Contents

Verify that all items listed below are included in your package:

- 1 x HARDELL 4V Cordless Rotary Tool
- 1 x Hard Storage Case
- 1 x Type-C Charging Cable
- 35 x Assorted Accessories (e.g., sanding bands, sanding shank, sanding paper, HSS cutting disc, wheel mandrel, drilling bits, aluminum oxide grinding wheel, diamond bits, wool polishing wheel, wrench, collets)

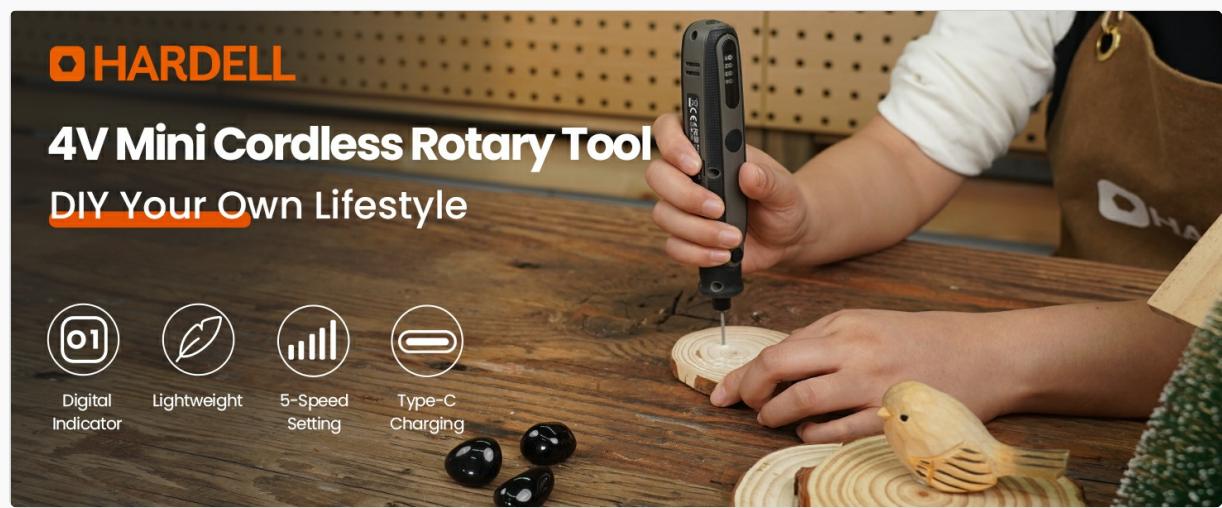


Figure 1: Included Accessories Overview

3. Product Overview

The HARDELL 4V Cordless Rotary Tool features an ergonomic design for comfortable handling and precise control. Key components include:

- **Power Button:** Turns the tool on and off.
- **Speed Adjustment Buttons (+/-):** Adjusts between 5 speed settings.
- **Digital Indicator:** Displays current speed setting.
- **LED Light:** Illuminates the work area for improved visibility.
- **Accessory Locking Mechanism:** Secures accessories in place.
- **Type-C Charging Port:** For convenient battery charging.



Figure 2: HARDELL Rotary Tool Features

4. Safety Instructions

Always follow basic safety precautions to reduce the risk of fire, electric shock, and personal injury when using this tool:

- Read all instructions before use.
- Wear appropriate personal protective equipment, including eye protection, dust mask, and gloves.
- Keep your 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.
- Secure your workpiece. Use clamps or a vise to hold the workpiece firmly.
- Avoid accidental starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the tool.
- Do not overreach. Keep proper footing and balance at all times.
- Disconnect the battery pack from the tool before making any adjustments, changing accessories, or storing power tools.
- Store idle tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.

5. Setup

5.1 Charging the Battery

The HARDELL rotary tool is equipped with a 4V 1.5Ah Lithium-Ion battery. Before first use, fully charge the tool.

1. Locate the Type-C charging port on the tool.
2. Connect the provided Type-C charging cable to the tool and a compatible USB power source (e.g., wall adapter, power bank).
3. The charging indicator light will show the charging status. A full charge typically takes 1-2 hours.
4. Once fully charged, disconnect the charging cable.



Figure 3: Type-C Fast Charging and Speed Levels

5.2 Attaching Accessories

To change or attach an accessory:

1. Ensure the tool is turned off.
2. Press and hold the accessory locking button located near the chuck.
3. While holding the button, loosen the chuck nut by turning it counter-clockwise.
4. Insert the desired accessory shank into the collet. Ensure the shank is fully seated.
5. Tighten the chuck nut by turning it clockwise until the accessory is securely held. Release the locking button.
6. Gently pull on the accessory to confirm it is firmly in place before operation.

6. Operating Instructions

6.1 Powering On/Off

To turn the tool on, press the power button. To turn it off, press the power button again. The tool will remember the last speed setting used.

6.2 Adjusting Speed

The tool offers 5 adjustable speed settings, ranging from 5,000 RPM to 18,000 RPM. Use the '+' and '-' buttons to increase or decrease the speed. The digital indicator will display the current speed level.

6.3 Applications

The HARDELL rotary tool is suitable for various tasks. Select the appropriate accessory and speed for your material and desired outcome.

- **Sanding:** Use sanding bands or paper for smoothing surfaces.

- **Engraving:** Utilize diamond bits for intricate designs on various materials.
- **Polishing:** Attach wool polishing wheels to achieve a smooth, shiny finish.
- **Grinding:** Employ aluminum oxide grinding wheels for material removal and shaping.
- **Cutting:** Use HSS cutting discs for precise cuts on softer materials.
- **Drilling:** Insert drilling bits for creating small holes.
- **Carving:** Use specialized bits for detailed carving work.
- **Cleaning:** Certain accessories can be used for light cleaning and deburring.



Figure 4: Multi-Purpose Applications

6.4 LED Work Light

The integrated LED light automatically activates when the tool is running, providing illumination to your work surface for enhanced precision and visibility, especially in dimly lit areas.

7. Maintenance

7.1 Cleaning

Regular cleaning ensures optimal performance and extends the tool's lifespan.

- Always disconnect the tool from any power source and remove accessories before cleaning.
- Use a soft, damp cloth to wipe down the tool's exterior. Do not use harsh chemicals or abrasive cleaners.
- Clear any dust or debris from the ventilation openings to prevent overheating.
- Clean accessories after each use to maintain their effectiveness.

7.2 Storage

Store the tool and its accessories in a dry, secure location, away from direct sunlight and extreme temperatures. Use the provided hard case for organized and protected storage.

8. Troubleshooting

If you encounter issues with your HARDELL rotary tool, refer to the following common problems and solutions:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Tool does not turn on	Battery is depleted	Charge the battery fully (refer to Section 5.1).
Tool stops during operation	Overload protection activated	Reduce pressure on the workpiece. Allow the tool to cool down if it feels hot.
Accessory is loose or wobbles	Chuck nut not tightened properly	Ensure the accessory is fully seated and the chuck nut is securely tightened (refer to Section 5.2).
Reduced performance	Dirty accessories or tool	Clean the tool and accessories (refer to Section 7.1).

If the problem persists after attempting these solutions, please contact HARDELL customer support for assistance.

9. Specifications

- **Brand:** HARDELL
- **Model Number:** DM12502BAGHD-1
- **Voltage:** 4 Volts
- **Power Source:** Battery Powered
- **Battery Type:** Lithium Ion (1 x 9V battery included)
- **Minimum Speed:** 5000 RPM
- **Maximum Rotational Speed:** 18000 RPM
- **Item Weight:** 8.1 ounces
- **Package Dimensions:** 7.91 x 2.48 x 1.65 inches
- **Special Features:** Compact, Cordless, LED Light, Multi-Use, Variable Speed

10. Warranty and Support

For warranty information, technical support, or any questions regarding your HARDELL 4V Cordless Rotary Tool, please refer to the contact information provided on the product packaging or visit the official HARDELL website. Keep your purchase receipt as proof of purchase for warranty claims.