

PHALANX TG-PRT R4 Ace-Grey&Green

PHALANX 4V Cordless Rotary Tool Kit (R4-Standard) Instruction Manual

Model: TG-PRT R4 Ace-Grey&Green

1. IMPORTANT SAFETY INSTRUCTIONS

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.

- **Work Area Safety:** 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.
- **Electrical Safety:** Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- **Personal Safety:** Always wear eye protection. Use appropriate safety equipment such as dust masks, non-skid safety shoes, hard hats, or hearing protection when necessary. Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. The correct power tool 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.

2. PRODUCT OVERVIEW

The PHALANX 4V Cordless Rotary Tool Kit (R4-Standard) is a versatile and portable tool designed for various DIY crafts and light home improvement tasks. It features a powerful motor, a long-lasting battery, and a range of accessories for cutting, sanding, carving, polishing, and engraving.

Key Features:

- **Powerful Motor:** Enhanced 380 motor for robust performance with minimal vibration and noise. Top speed of 25000 RPM.
- **Cordless and Portable:** Offers convenience for use anywhere without power cord constraints.
- **Large Capacity Battery:** 2500mAh battery charges quickly via Type-C USB (2-4 hours).
- **Digital Display:** LED battery indicator and digital speed display for clear status monitoring.
- **Shaft Lock Safety:** Integrated shaft lock with stop-before-lock function for enhanced operational safety.
- **Memory Function:** Retains the last set speed for up to 5 minutes after shutdown.
- **Ergonomic Design:** Compact, lightweight body with a non-slip soft rubber grip for comfortable and extended use.
- **Rich Accessory Set:** Includes 80 pieces for various applications like carving, sanding, polishing, and drilling.

Components:

The rotary tool comes with the main unit and a comprehensive set of accessories. Refer to the image below for a visual guide to the included components.

MASTER EVERY PROJECT

Great for light DIY and handmade decoration-making

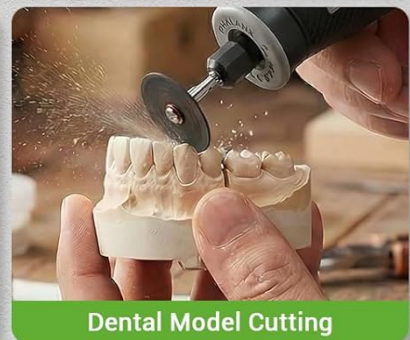


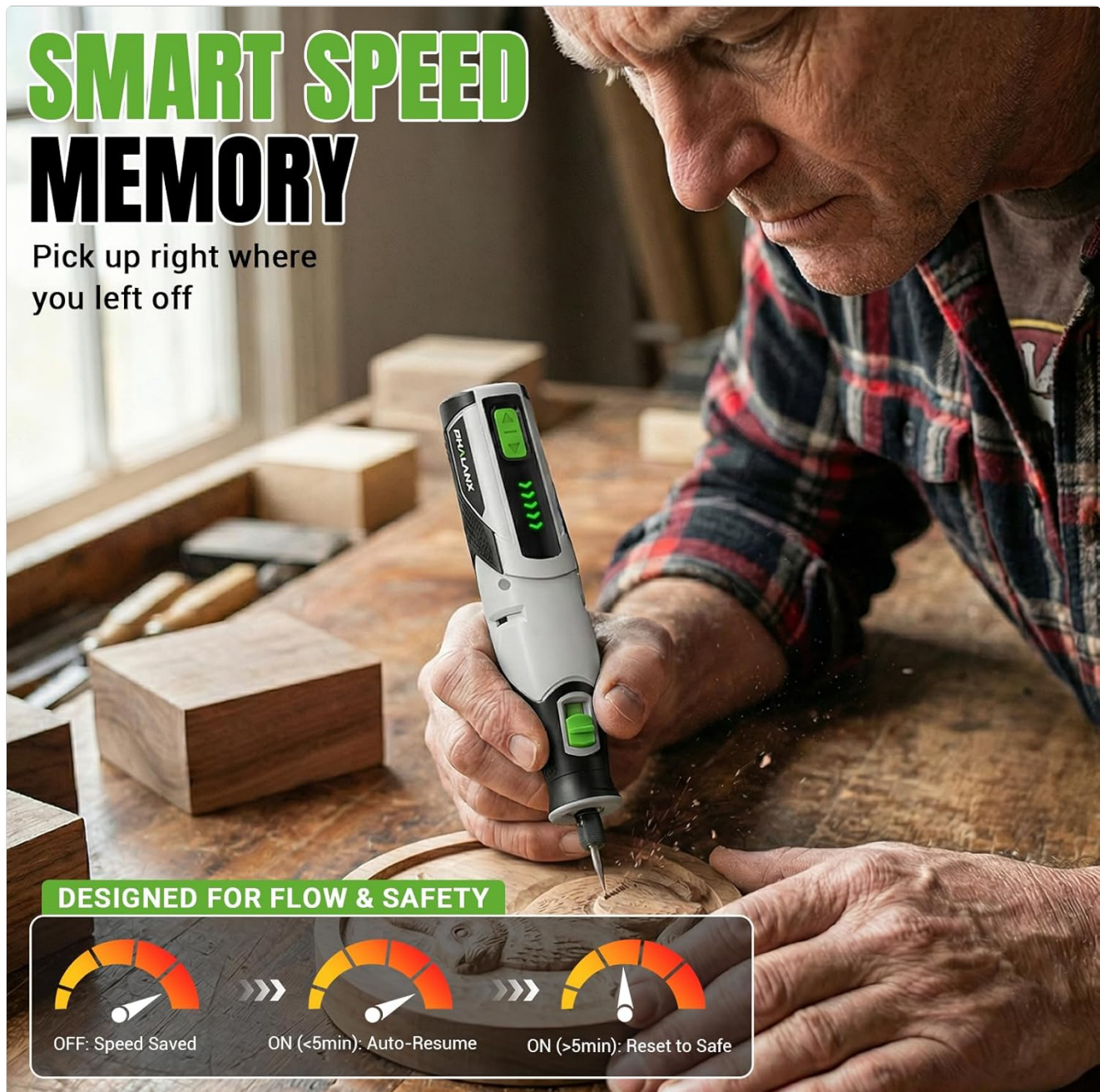
Image: PHALANX Rotary Tool with its 80-piece accessory kit, including various bits for cutting, drilling, grinding, engraving, sanding, and polishing, along with charging cable and wrench.

3. SETUP

3.1 Charging the Battery

Before first use, fully charge the rotary tool's 2500mAh battery. The tool features a Type-C USB charging port for convenience.

- Connect the provided Type-C USB cable to the charging port on the tool.
- Connect the other end of the USB cable to a compatible USB power source (e.g., wall adapter, computer USB port).
- The LED battery indicator and digital display will show the charging status. A full charge typically takes 2-4 hours.
- Disconnect the charger once the battery is fully charged.



SMART SPEED MEMORY

Pick up right where you left off

DESIGNED FOR FLOW & SAFETY

OFF: Speed Saved ON (<5min): Auto-Resume ON (>5min): Reset to Safe

Image: Close-up of the PHALANX Rotary Tool highlighting the digital battery and speed display, and the Type-C charging port.

3.2 Installing Accessories

The PHALANX rotary tool uses a collet system to secure various accessories. Follow these steps to safely change bits:

1. **Lock Spindle:** Slide the safety lock button to the "LOCK" position. This prevents the shaft from rotating.
2. **Loosen Nut:** Rotate the locking nut counter-clockwise by hand to loosen it.
3. **Change Bit:** Carefully remove the old accessory (if any) and insert the shank of the new accessory fully into the collet.
4. **Tighten:** Secure the nut by rotating it clockwise. Use the included wrench to firmly tighten the nut, ensuring the accessory is securely held. Do not overtighten.
5. **Unlock Spindle:** Slide the safety lock button back to the "UNLOCKED" position before operation.



Image: Visual guide demonstrating the four steps for safely changing accessories on the rotary tool.

4. OPERATION

4.1 Power On/Off

To turn the tool on, press and hold the power button until the display illuminates. To turn it off, press and hold the power button again.

4.2 Speed Adjustment

The PHALANX rotary tool offers 5 preset speed adjustments (6000-25000 RPM) to suit various materials and tasks. Use the speed control buttons (+ and -) to cycle through the speed levels. The digital display will show the current speed setting.

- **Level 1 (6000 RPM):** Ideal for fine finishing and delicate tasks like pet nail grooming.
- **Level 2 (9000 RPM):** Suitable for sanding and wood carving.
- **Level 3 (12000 RPM):** For general cutting and nail trimming.
- **Level 4 (18000 RPM):** Effective for fast cutting and stone grinding.
- **Level 5 (25000 RPM):** High-speed setting for hard materials and demanding tasks.

The tool features a memory function that retains the last used speed setting for up to 5 minutes after being turned off, simplifying operations for recurring tasks.

PRECISION CONTROL

5 Speeds for Any Material



5 SPEEDS LEVELS

● 01
6000 RPM
Fine Finishing &
Pet Grooming

● 02
9000 RPM
Sanding &
Wood Carving

● 03
12000 RPM
General Cutting &
Nail Trimming

● 04
18000 RPM
Fast cutting &
Stone Grinding

● 05
25000 RPM
High-Speed Cutting &
Hard Materials

Image: Diagram illustrating the 5 speed levels of the rotary tool and their corresponding applications.

4.3 General Usage Tips

- Always test the tool on a scrap piece of material before working on your main project.
- Apply light pressure. Let the tool and accessory do the work. Excessive pressure can cause the tool to overheat, slow down, or damage the workpiece.
- Keep the tool moving to prevent burning or gouging the material.
- Ensure proper ventilation in your workspace, especially when generating dust or fumes.

DIY SHOWS



Image: Examples of projects that can be completed with the rotary tool, such as metal polishing, wood sanding, and carving.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your PHALANX rotary tool.

- **Cleaning:** After each use, wipe down the tool with a clean, dry cloth. Use a soft brush to remove dust and debris from ventilation openings and the collet area. Do not use harsh chemicals or abrasive cleaners.
- **Accessory Care:** Clean accessories after use. Store them in the provided case to prevent damage and loss. Replace worn or damaged accessories promptly.
- **Battery Storage:** For long-term storage, ensure the battery is partially charged (around 50%). Store the tool and battery in a cool, dry place away from direct sunlight and extreme temperatures.
- **Collet Maintenance:** Periodically inspect the collet and collet nut for wear or damage. A worn collet can lead to accessories slipping or vibrating excessively.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your rotary tool.

Problem	Possible Cause	Solution
Tool does not turn on.	Battery is depleted.	Charge the battery fully using the Type-C USB cable.
Accessory slips or vibrates excessively.	Collet nut is not tightened sufficiently, or accessory shank is not fully inserted. Collet is worn.	Ensure the accessory is fully inserted and the collet nut is securely tightened with the wrench. Inspect and replace the collet if worn.
Tool overheats quickly.	Excessive pressure applied during operation. Continuous high RPM use. Blocked ventilation.	Reduce pressure on the workpiece. Allow the tool to cool down during extended use. Ensure ventilation slots are clear of debris.
Reduced power or speed.	Low battery charge. Accessory is dull or incorrect for the task.	Recharge the battery. Replace dull accessories. Select the appropriate accessory and speed for the material.

7. SPECIFICATIONS

Feature	Detail
Brand	PHALANX
Model Number	TG-PRT R4 Ace-Grey&Green
Voltage	4 Volts
Power Source	Battery Powered
Battery Capacity	2500mAh
Charging Time	2-4 hours (via Type-C USB)
Minimum Rotational Speed	6000 RPM
Maximum Rotational Speed	25000 RPM
Number of Speed Settings	5 Preset Speeds
Item Weight	9.6 ounces
Included Components	Rotary Tool, 80 PCS Accessories

8. PRODUCT VIDEOS

Watch this official product video for additional guidance and demonstrations.

PHALANX 4V Cordless Rotary Tool Kit Overview

Your browser does not support the video tag.

Video: An official overview of the PHALANX 4V Cordless Rotary Tool Kit, demonstrating its features and various applications in a

concise manner.

9. WARRANTY AND SUPPORT

PHALANX products are manufactured under strict quality standards. For warranty information, technical support, or any questions regarding your product, please refer to the contact information provided in the product packaging or visit the official PHALANX website.

Keep your purchase receipt as proof of purchase for any warranty claims.