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## RYOBI PCL424B

# RYOBI ONE+ 18V Cordless Compact Fixed Base Router (PCL424B) Instruction Manual

Model: PCL424B

## INTRODUCTION

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This manual provides essential instructions for the safe operation, setup, maintenance, and troubleshooting of your RYOBI ONE+ 18V Cordless Compact Fixed Base Router, model PCL424B. Please read this manual thoroughly before use to ensure optimal performance and safety. This tool is designed for routing wood and similar materials.

## IMPORTANT SAFETY INFORMATION

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**WARNING: Always follow basic safety precautions when using power tools to reduce the risk of fire, electric shock, and personal injury.**

- Read all instructions in this manual before operating the tool.
- Always wear eye protection that complies with ANSI Z87.1.
- Keep your work area clean and well-lit to prevent accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- Keep children and bystanders away from the operating area.
- Use the correct tool for your application. Do not force a small tool or attachment to do the job of a heavy-duty tool.
- Disconnect the battery pack from the tool before making any adjustments, changing accessories, or storing the tool.
- Maintain tools with care. Keep cutting tools sharp and clean for better and safer performance.
- Use only accessories specified by the manufacturer for this tool.
- Store idle tools out of the reach of children and untrained persons.

## PACKAGE CONTENTS

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The RYOBI ONE+ 18V Cordless Compact Fixed Base Router (PCL424B) includes:

- RYOBI ONE+ 18V Cordless Compact Fixed Base Router (PCL424B)
- Collet Wrench
- Vacuum Dust Chute
- Operator's Manual

**Note: Battery and charger are sold separately.**

**BATTERY  
&  
CHARGER  
SOLD  
SEPARATELY**

*Image description: A graphic with large green text stating "BATTERY & CHARGER SOLD SEPARATELY".*

## COMPONENTS AND FEATURES

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Familiarize yourself with the main parts of your router for safe and effective operation.

- **Variable Speed Dial:** Located on the top of the tool, this dial allows you to select a speed between 20,000 and 30,000 RPM.
- **Micro-adjustment Dial:** Provides fine-tuning for precise depth control, typically marked in 1/64 inch increments.
- **Quick Release Lever:** Used for quick and easy macro depth adjustments and for removing the router base.
- **Fixed Base:** Ensures stability and consistent depth during routing operations.
- **Ergonomic Design:** The compact and contoured grip enhances comfort and control during extended use.



Image description: A front-side view of the RYOBI ONE+ 18V Cordless Compact Fixed Base Router, highlighting the quick-

## SETUP

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### 1. Battery Installation

Ensure the router is switched off before installing or removing the battery pack.

1. Align the battery pack with the battery port on the router.
2. Slide the battery pack into the router until it clicks securely into place.
3. To remove, press the release latch on the battery pack and pull it out.

### 2. Router Bit Installation

Always disconnect the battery pack before installing or changing router bits.

1. Loosen the collet nut using the provided collet wrench.
2. Insert the router bit into the collet, ensuring at least 3/4 of the bit's shank is seated.
3. Tighten the collet nut firmly with the collet wrench. Do not overtighten, as this can damage the collet or bit.

### 3. Depth Adjustment

The router features both macro and micro depth adjustments for precise control.

1. **Macro Adjustment:** Loosen the quick-release lever. Adjust the router body up or down to the approximate desired depth. Secure the quick-release lever firmly.
2. **Micro Adjustment:** Use the micro-adjustment dial for fine-tuning the depth. Rotate the dial clockwise to decrease the cutting depth and counter-clockwise to increase it.



*Image description: A close-up view of the RYOBI ONE+ 18V Cordless Compact Fixed Base Router's depth adjustment*

## OPERATING INSTRUCTIONS

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### 1. Powering On/Off

To turn the router ON, slide the power switch to the "I" (ON) position. To turn OFF, slide the switch to the "O" (OFF) position.

### 2. Variable Speed Control

The variable speed dial allows you to select a speed between 20,000 and 30,000 RPM, optimizing performance for different materials and bits.

- Lower speeds are generally recommended for larger diameter bits, harder materials, or when more control is required.
- Higher speeds are suitable for smaller diameter bits and softer materials.
- Always test on a scrap piece of material to determine the optimal speed and feed rate for your specific application.

### 3. Routing Techniques

- Ensure the workpiece is securely clamped to prevent movement during operation.
- Maintain a firm grip on the router with both hands.
- Always move the router against the direction of bit rotation to prevent kickback and maintain control.
- For deeper cuts, make multiple shallow passes rather than one deep pass. This reduces strain on the tool, improves cut quality, and minimizes the risk of burning the material.
- Utilize the included vacuum dust chute by connecting it to a shop vacuum for a cleaner work area and improved visibility of the cutting line.





*Image description: The RYOBI ONE+ 18V Cordless Compact Fixed Base Router shown with the vacuum dust chute attached, ready for operation.*

## MAINTENANCE

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### Cleaning

- Always disconnect the battery pack before performing any cleaning or maintenance.
- Use a soft brush or compressed air to remove dust and debris from the ventilation openings and around the collet area.
- Wipe the tool's housing with a clean, damp cloth. Do not use harsh chemicals, solvents, or abrasive cleaners, as these can damage plastic parts.
- Regularly clean the collet and collet nut to ensure proper bit seating and prevent runout.

### Storage

- Store the router in a dry, secure location that is inaccessible to children and unauthorized users.
- Remove the battery pack from the tool during long-term storage.
- Protect the router from direct sunlight, extreme temperatures, and excessive moisture.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Router does not start	Battery not charged or improperly installed; Power switch off	Charge battery; ensure battery is fully seated; slide power switch to ON position.
Poor cut quality (e.g., rough edges, burning)	Dull bit, incorrect speed, or too deep a cut; improper feed rate	Replace or sharpen bit; adjust speed (lower for burning, higher for rough); make shallower passes; adjust feed rate.
Excessive vibration	Loose bit or damaged bit; unbalanced bit	Ensure bit is securely tightened in the collet; replace damaged or unbalanced bit.
Overheating	Overloading the tool; blocked ventilation openings	Reduce the load on the router (make shallower passes); clear any debris from ventilation openings.

## SPECIFICATIONS

Feature	Detail
Brand	RYOBI
Model	PCL424B
Power Source	Battery Powered
Voltage	18 Volts
Item Weight	3.22 Pounds
Maximum Rotational Speed	30,000 RPM
Base Type	Fixed
Battery Description	Lithium-Ion (Battery sold separately)
UPC	033287197286
Product Dimensions	6.25 x 4 x 7.3 inches
Included Components	Bare Tool, Collet Wrench, Vacuum Dust Chute, Operator's Manual

## WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official RYOBI website. Warranty terms and conditions may vary.

For technical support, parts, service, or any questions regarding your RYOBI ONE+ 18V Cordless Compact Fixed Base Router, please contact RYOBI customer service:

- **Website:** [www.ryobitools.com](http://www.ryobitools.com)
- **Phone:** 1-800-525-2579