

Manuals+

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

manuals.plus /

- › [Aoyue](#) /
- › [User Manual: Aoyue 4545W 44x44mm BGA Hot Air Rework Nozzle](#)

Aoyue AO4545W

User Manual: Aoyue 4545W 44x44mm BGA Hot Air Rework Nozzle

Triple Grid Design for Enhanced Heat Distribution

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your Aoyue 4545W 44x44mm BGA Hot Air Rework Nozzle. This precision accessory is designed to provide uniform heat distribution for rework applications, particularly for BGA (Ball Grid Array) components.



Figure 1: Aoyue 4545W 44x44mm BGA Hot Air Rework Nozzle. This image shows the metallic nozzle with a flared, square-shaped base and a cylindrical top with a tightening screw, designed for precise heat application.

2. SAFETY INFORMATION

WARNING: Always exercise extreme caution when working with hot air rework equipment. High temperatures can cause severe burns and damage to components if not handled properly.

- Ensure the hot air rework station is turned off and cooled down before attaching or removing the nozzle.
- Wear appropriate personal protective equipment (PPE), including heat-resistant gloves and eye protection.
- Work in a well-ventilated area to dissipate fumes from soldering or desoldering.
- Do not touch the nozzle immediately after use, as it will remain hot for an extended period.
- Keep out of reach of children.

3. SETUP

The Aoyue 4545W nozzle is designed for compatibility with Aoyue hot air rework stations. Follow these steps to properly attach the nozzle:

1. Ensure your hot air rework station's handle is cool and disconnected from power.
2. Align the cylindrical opening of the 4545W nozzle with the hot air outlet of your rework station's handle.
3. Slide the nozzle onto the outlet until it is firmly seated.
4. Tighten the integrated screw on the nozzle's collar to secure it in place. Do not overtighten.
5. Verify that the nozzle is stable and does not wobble before powering on the rework station.

4. OPERATING INSTRUCTIONS

This nozzle is specifically designed for BGA rework, providing a concentrated and evenly distributed heat profile. Proper operation requires familiarity with your hot air rework station.

- **Temperature and Airflow Settings:** Refer to your hot air rework station's manual for recommended temperature and airflow settings for BGA components. Start with lower settings and gradually increase as needed.
- **Component Placement:** Position the nozzle directly over the BGA component, ensuring the square opening fully covers the component for optimal heat transfer.
- **Heat Distribution:** The triple grid design within the nozzle ensures uniform heat distribution across the 44x44mm area, minimizing hot spots and cold spots, which is crucial for successful BGA rework.
- **Monitoring:** Observe the solder balls or paste during the reflow process. Use appropriate tools (e.g., tweezers, vacuum pick-up tool) for component removal or placement once the solder reaches its melting point.
- **Cool Down:** After use, place the hot air handle back into its holder (if applicable) and allow the nozzle to cool down naturally. Do not force cool the nozzle.

5. MAINTENANCE

Regular maintenance ensures the longevity and performance of your nozzle.

- **Cleaning:** After the nozzle has completely cooled, gently wipe the exterior with a soft, dry cloth to remove any flux residue or debris. Avoid using abrasive cleaners or solvents.
- **Inspection:** Periodically inspect the nozzle for any signs of damage, such as warping, cracks, or blockages in the grid. A damaged nozzle can lead to uneven heat distribution.
- **Storage:** Store the nozzle in a clean, dry place, away from dust and corrosive materials.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Uneven heat distribution	Nozzle partially blocked; Nozzle not seated correctly; Hot air station malfunction.	Clean the nozzle grid; Re-attach and secure the nozzle; Consult your hot air station's manual or contact service.
Nozzle loose or wobbling	Tightening screw not secured; Incorrect nozzle size for handle.	Tighten the screw firmly; Ensure compatibility with your hot air station model.
Difficulty attaching/removing nozzle	Residue buildup; Nozzle or handle deformed.	Clean mating surfaces; Inspect for damage and replace if necessary.

7. SPECIFICATIONS

Brand: Aoyue

Model Number: AO4545W

Part Number: 4545W

Nozzle Size: 44x44mm (Square)

Design: Triple Grid for optimal heat distribution

Material: Metal

Product Dimensions: 7.62 x 7.62 x 7.62 cm (3 x 3 x 3 inches)

Item Weight: 113.4 grams (4 ounces)

ASIN: B007IXO0YY

UPC: 696727404254

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your Aoyue hot air rework station or contact Aoyue customer service directly. This nozzle is an accessory and its warranty may be covered under the main rework station's warranty or as a separate component.

For further assistance, you may visit the [Aoyue brand page on Amazon](#).