

[Manuals.plus](#) /

› [GeekLJT](#) /

› GeekLJT Digital RDA5807 FM Radio Soldering Kit User Manual

GeekLJT RSYJ-5AR

GeekLJT Digital RDA5807 FM Radio Soldering Kit User Manual

Model: RSYJ-5AR

Brand: GeekLJT

INTRODUCTION

This manual provides detailed instructions for assembling, operating, and maintaining your GeekLJT Digital RDA5807 FM Radio Soldering Kit. This kit is designed for educational purposes, allowing users to learn basic electronics and soldering techniques while building a functional FM radio.

SAFETY INFORMATION

Please read and understand all safety precautions before beginning assembly or operation.

- Always wear appropriate eye protection when soldering.
- Ensure adequate ventilation in your workspace to avoid inhaling solder fumes.
- Use a heat-resistant mat to protect your work surface.
- Allow soldered components to cool before handling.
- Keep out of reach of small children due to small parts and hot tools.
- Ensure the soldering iron is properly grounded and turned off when not in use.

PACKAGE CONTENTS

Before beginning assembly, verify that all components listed below are present in your kit.

Components of The Radio Kit

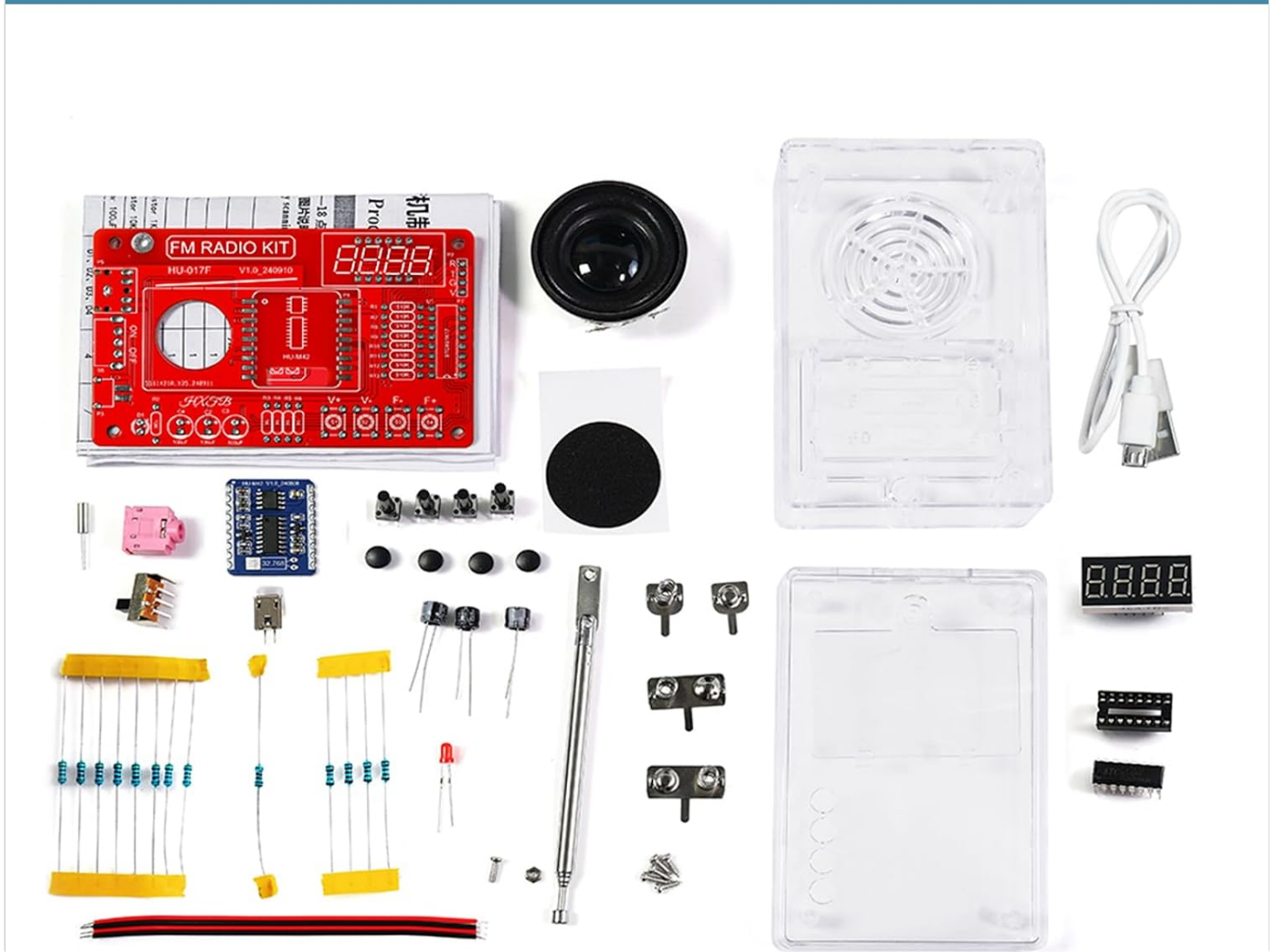


Image: All components of the GeekLJT Digital RDA5807 FM Radio Soldering Kit laid out on a white surface, including the main circuit board, speaker, acrylic casing parts, antenna, various resistors, capacitors, integrated circuits, buttons, and wires.

- Main Circuit Board (PCB)
- RDA5807 FM Radio Module
- Speaker
- Acrylic Casing Parts
- Telescopic Antenna
- Resistors (various values)
- Capacitors (electrolytic and ceramic)
- Diodes
- Transistors
- Integrated Circuits (IC sockets, ICs)
- Buttons
- LED Display
- 3.5mm Earphone Jack
- USB Power Port
- Power Switch

- Battery Holder (for 3x AAA batteries, batteries not included)
- Connecting Wires
- Screws and Nuts for assembly
- User Manual (physical or QR code link)

ASSEMBLY INSTRUCTIONS

This section outlines the general steps for assembling your radio kit. For detailed, step-by-step visual instructions, please refer to the comprehensive PDF manual available via the link below.



Image: A visual representation showing the individual components of the radio kit on the left, with an arrow pointing to the fully assembled radio on the right, encased in clear acrylic.

1. **Component Identification:** Familiarize yourself with all components and their corresponding locations on the Printed Circuit Board (PCB).
2. **Soldering Order:** It is generally recommended to solder smaller components (resistors, diodes) first, followed by larger components (capacitors, IC sockets, buttons, connectors).
3. **Solder IC Sockets:** Solder the sockets for the integrated circuits before inserting the actual ICs. This prevents heat damage to the ICs.
4. **Solder Buttons and Connectors:** Attach the control buttons, earphone jack, USB power port, and power switch to their designated pads.
5. **Solder Speaker and Antenna Connections:** Connect the speaker wires and antenna base to the PCB.
6. **Install LED Display:** Carefully solder the LED display module.
7. **Assemble Acrylic Casing:** Once all soldering is complete and verified, assemble the acrylic casing around the circuit board, securing it with the provided screws and nuts. Ensure the speaker is correctly positioned within the casing.

For detailed visual instructions, please download the official user manual:

[Download Detailed PDF User Manual](#)

[illegible]

Image: A circuit schematic diagram for the radio kit is displayed at the top, with an image below showing a physical user manual and a QR code for digital access.

1. **Battery Installation:** Open the battery compartment (usually on the back or bottom of the casing). Insert 3 AAA batteries, ensuring correct polarity (+/-). Close the compartment securely.
2. **Power On:** Flip the "ON/OFF" switch to the "ON" position. The LED display should illuminate.
3. **Antenna Extension:** Extend the telescopic antenna fully for optimal signal reception.

OPERATING INSTRUCTIONS

High Sensitivity & High Anti-interference Ability

87-108MHz



Image: The fully assembled Digital RDA5807 FM Radio Kit, featuring a clear acrylic casing, red circuit board, LED display, control buttons, and an extended telescopic antenna.

1. **Power On/Off:** Use the slide switch located on the side of the radio to turn the device ON or OFF.
2. **Volume Control:** Use the 'V+' and 'V-' buttons to adjust the volume level.
3. **Station Tuning:**
 - Use the 'F+' and 'F-' buttons to manually tune to the next or previous frequency.
 - Press and hold 'F+' or 'F-' for automatic station search. The radio will scan and stop at the next strong signal.
4. **Earphone/Speaker Output:** A 3.5mm earphone jack is located on the side. Connect headphones or external speakers for private listening or enhanced audio output.
5. **Sleep Mode:** The radio features a sleep mode to conserve power. It will automatically enter sleep mode after a period of inactivity.
6. **Power-Off Memory:** The radio retains the last tuned station and volume settings when powered off.

MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the radio. Avoid using abrasive cleaners or solvents.
- **Battery Replacement:** When the radio's performance degrades or the display dims, replace all three AAA batteries with new ones. Ensure correct polarity.
- **Storage:** Store the radio in a cool, dry place away from direct sunlight and extreme temperatures when not in use for extended periods.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Radio does not power on.	Batteries are dead or incorrectly installed. Power switch is off.	Check battery polarity and replace if necessary. Ensure power switch is in the 'ON' position. Verify all power connections are soldered correctly.
No sound or very low sound.	Volume is too low. Speaker not connected or faulty. Earphones plugged in.	Increase volume using 'V+' button. Check speaker connections. Unplug earphones if sound is desired from the internal speaker.
Poor radio reception.	Antenna not extended. Weak signal area. Interference.	Fully extend the telescopic antenna. Move to an area with better FM signal. Avoid sources of electronic interference.
Buttons not responding.	Buttons incorrectly soldered or faulty.	Inspect button solder joints for cold joints or bridges.

SPECIFICATIONS

- **Model:** RSYJ-5AR
- **Brand:** GeekLJT
- **Radio Module:** RDA5807
- **Tuner Technology:** FM
- **Radio Bands Supported:** 87~108 MHz
- **Power Source:** 3x AAA Batteries (not included)
- **Connectivity Technology:** Wireless
- **Output:** Internal Speaker, 3.5mm Earphone Jack
- **Product Dimensions:** 4.6"L x 2.9"W x 2.9"H (11.68 cm x 7.37 cm x 7.37 cm)
- **Item Weight:** 4.8 ounces (136 grams)
- **Special Features:** Portable, Noise Elimination, Bass Enhancement, High Sensitivity, Low Noise, Strong Anti-interference, Sleep Mode, Power-Off Memory, Automatic Station Search and Storage.

WARRANTY AND SUPPORT

GeekLJT is committed to providing quality products and customer satisfaction. For any questions, technical assistance, or issues with your kit, please contact GeekLJT customer support through the retailer where the product was purchased. Please refer to your purchase documentation for specific warranty details.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B0DZBZFMWL>

More documents and user manuals: **<https://manuals.plus/>**