

BANRIA GY21966-1

BANRIA DIY Solder Kit Digital Alarm Clock User Manual

Model: GY21966-1 | Brand: BANRIA

1. INTRODUCTION

This manual provides comprehensive instructions for assembling and operating your BANRIA DIY Solder Kit Digital Alarm Clock. This kit offers an engaging electronic project experience, culminating in a fully functional digital alarm clock with advanced features.

The assembled clock features a 6-digit LED display, three independent alarms, a voice recording function for personalized alarm tones, 12/24-hour display mode, and a calendar function. The robust black PCB design ensures a modern and high-quality finish, suitable for any desk, workshop, or bedside table.

2. SAFETY INFORMATION

- Always wear appropriate safety glasses when soldering to protect your eyes from solder splashes and fumes.
- Work in a well-ventilated area to avoid inhaling solder fumes. Use a fume extractor if available.
- Ensure your soldering iron is placed in a safe holder when not in use and is unplugged when finished.
- Avoid touching the hot tip of the soldering iron. Allow components to cool before handling.
- Keep all components and tools out of reach of children and pets.
- Verify component polarity (e.g., LEDs, diodes, electrolytic capacitors) before soldering to prevent damage.
- Double-check all connections before applying power to the assembled circuit.

3. PACKAGE CONTENTS

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

- Printed Circuit Board (PCB)
- All necessary electronic components (resistors, capacitors, ICs, LEDs, buttons, etc.)
- Power cable (USB Type-C)

- Assembly instructions (printed)
- Acrylic casing components (if included in specific variant)



Figure 3.1: Example of electronic kit components.

This image displays various electronic components typically found in a DIY kit, including LED screens, multiple switches, connectors, a circuit board (PCB), wires, and other mounting parts, essential for the assembly of the digital alarm clock.

4. SETUP AND ASSEMBLY

The BANRIA Digital Alarm Clock is a DIY solder kit. Follow the included printed instructions carefully for step-by-step assembly. Basic soldering skills are required. Ensure you have a soldering iron, solder, desoldering wick/pump, and side cutters before you begin.

1. **Prepare your workspace:** Ensure a clean, well-lit, and well-ventilated area. Gather all tools and components.
2. **Identify components:** Match components with the provided diagram in the printed manual. Pay attention to values and polarity.
3. **Solder smaller components first:** Start with resistors, diodes, and smaller capacitors, then move to IC sockets (if applicable), larger capacitors, and finally the LED display and buttons.
4. **Solder the LED display:** Carefully align and solder the 6-digit LED display.
5. **Install buttons and switches:** Solder the control buttons and the ON/OFF switch.
6. **Assemble the casing:** Once all electronic components are soldered and connections are checked, assemble the acrylic casing according to the instructions.
7. **Final inspection:** Visually inspect all solder joints for bridges or cold joints. Ensure no components are bent or incorrectly placed.

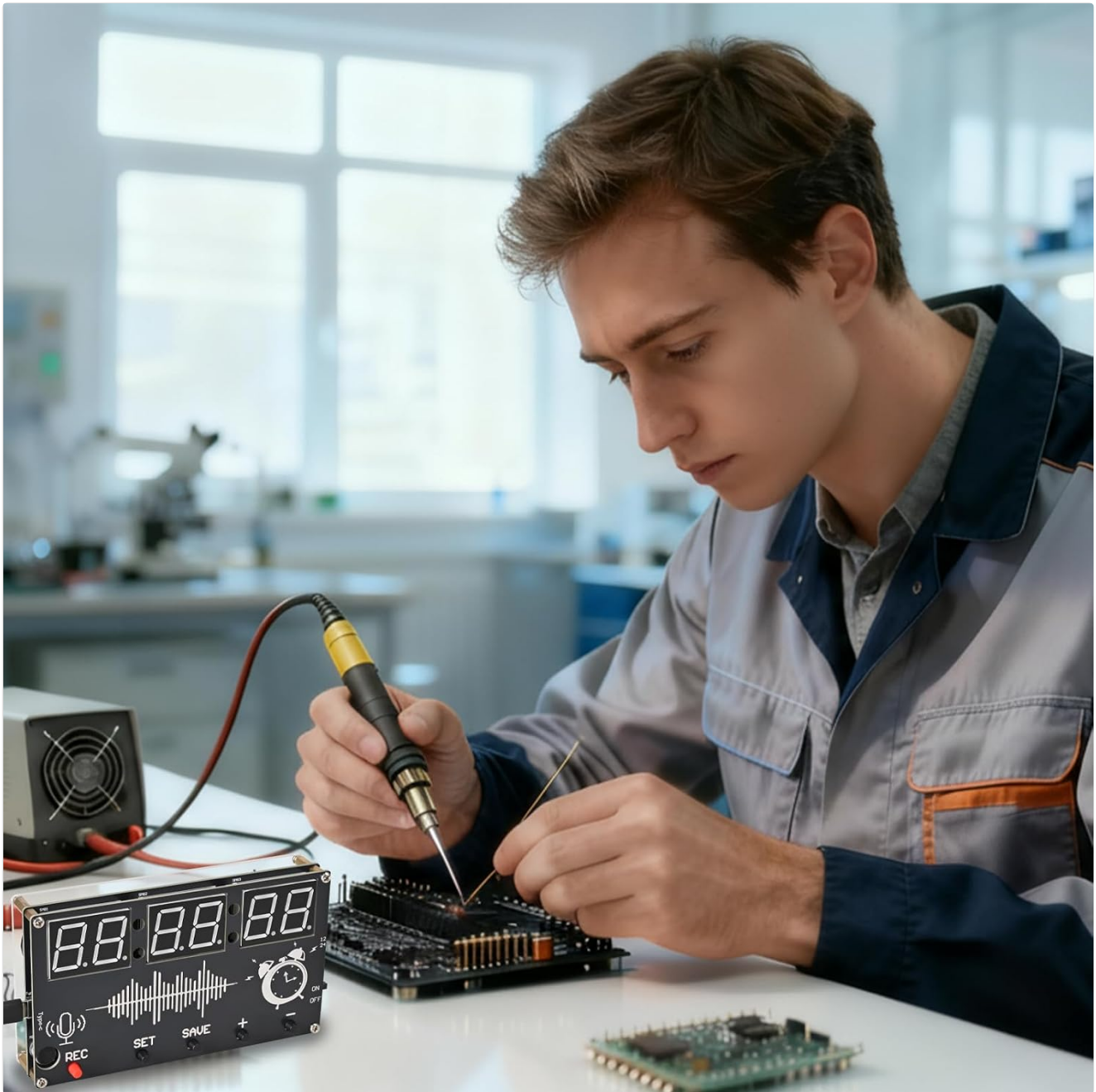


Figure 4.1: Soldering process during assembly.

This image illustrates an individual engaged in the soldering process, carefully attaching electronic components to a circuit board. The BANRIA digital alarm clock kit is visible in the foreground, demonstrating the hands-on nature of the assembly.

5. OPERATING INSTRUCTIONS

After successful assembly, connect the power cable to the clock and a suitable USB power source. Use the ON/OFF switch to power on the device.

5.1. Button Functions

Button	Function (Short Press)	Function (Long Press)	Function (In Settings)
REC	Mute active alarms; Playback recorded audio (after long press).	Start recording after signal tone.	Switch between configuration fields.

Button	Function (Short Press)	Function (Long Press)	Function (In Settings)
SET	1st press: Open settings; 2nd press: Enter edit mode; 3rd press: Return to main interface.	N/A	N/A
SAVE	Save changes and exit settings.	N/A	N/A
+/-	Navigate menus and adjust values.	N/A	Navigate menus and adjust values.

Tastenfunktionen



REC

- 1. **Langdruck:** Aufnahme nach dem Signalton starten; **erneuter Kurzdruck:** Wiedergabe.
- 2. **Kurzdruck:** Aktive Alarmer stummschalten.
- 3. **In den Einstellungen:** Zwischen Konfigurationsfeldern wechseln.

Set

- Beim ersten Drücken:** Einstellungen öffnen.
- Beim zweiten Drücken:** In den Bearbeitungsmodus wechseln.
- Beim dritten Drücken:** Zur Hauptoberfläche zurückkehren.

Save

- Kurzdruck:** Änderungen speichern und Einstellungen verlassen.

+ / -

- Menüs navigieren und Werte anpassen.**

Figure 5.1: Button functions overview.

This image provides a clear diagram detailing the functions of the REC, SET, SAVE, and +/- buttons on the BANRIA digital alarm clock, explaining their short press, long press, and in-settings functionalities.

5.2. Time and Date Settings

- 1. Press the **SET** button once to enter the settings menu.

2. Use the +/- buttons to navigate through different setting modes (Time, Date, Day of Week, Alarm 1, Alarm 2, Alarm 3).
3. When "Time" is selected, press **SET** again to enter edit mode. The hour digits will flash.
4. Use +/- to adjust the hour. Press **REC** to move to minutes, then seconds.
5. Repeat for Date (Year, Month, Day) and Day of Week.
6. To switch between 12-hour and 24-hour display, navigate to the time display mode and use the +/- buttons.
7. Press **SAVE** to confirm and exit settings.



Figure 5.2: Six setting modes.

This image illustrates the six different setting modes available on the BANRIA digital alarm clock, including configurations for time, date, day of the week, and individual settings for three independent alarms.

5.3. Setting Alarms

The clock features three independent alarms, each with its own ON/OFF switch.

1. Press **SET** to enter settings. Use +/- to navigate to "Alarm 1", "Alarm 2", or "Alarm 3".

2. Press **SET** again to enter edit mode for the selected alarm.
3. Use **+/-** to set the desired alarm hour and minute. Press **REC** to switch between hour and minute.
4. Each alarm has a physical ON/OFF switch located on the device. Ensure the switch is in the "ON" position for the alarm to activate.
5. Press **SAVE** to confirm and exit settings.
6. To silence an active alarm, short press the **REC** button.



Figure 5.3: Three independent alarms in use.

This image showcases the BANRIA digital alarm clock being used in different scenarios, emphasizing its capability to manage three independent alarms for various daily routines, such as waking up, work reminders, or study sessions.

5.4. Voice Recording Function

The clock allows you to record a personalized alarm tone.

1. Long press the **REC** button until you hear a signal tone.

2. Begin speaking or playing your desired audio. The recording duration is limited (refer to printed manual for exact duration).
3. Short press **REC** again to stop recording.
4. To play back your recorded message, short press **REC** when no alarm is active.
5. The recorded audio will be used as the alarm sound when an alarm triggers.



Figure 5.4: Recording a personal alarm tone.

This image depicts a family engaging with the BANRIA digital alarm clock, illustrating the process of recording a personal voice message or sound to be used as a customized alarm tone.

6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the display and casing. Avoid abrasive cleaners or solvents.
- **Power:** Always use the provided power cable and a compatible USB power adapter.
- **Environment:** Keep the clock away from extreme temperatures, direct sunlight, and high humidity.

- **Handling:** Handle the assembled clock with care to avoid damaging the electronic components or solder joints.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Clock does not power on.	No power, faulty connection, incorrect soldering.	Check power cable connection. Ensure ON/OFF switch is "ON". Inspect solder joints for bridges or cold joints. Verify component placement.
LED display is dim or incomplete.	Poor solder joint on display, faulty LED segment, power issue.	Re-solder display pins. Check for shorts. Ensure adequate power supply.
Alarm does not sound.	Alarm not enabled, volume too low, no recorded sound.	Ensure the physical alarm switch is "ON". Verify alarm time is set correctly. Check if a voice recording exists.
Buttons are unresponsive.	Poor solder joint on button, faulty button.	Inspect and re-solder button connections.
Voice recording not working.	Microphone not soldered correctly, recording memory full (unlikely for short messages), incorrect operation.	Check microphone solder joints. Follow recording instructions carefully (long press REC).

If you encounter issues not listed here or if the suggested solutions do not resolve the problem, please refer to the detailed troubleshooting section in your printed manual or contact customer support.

8. SPECIFICATIONS

- **Model Number:** GY21966-1
- **Brand:** BANRIA
- **Display:** 0.8" 6-digit LED
- **Dimensions (L x W x H):** 8 x 4 x 2 cm (3.15 x 1.57 x 0.79 inches)
- **Weight:** 180 grams (approx. 0.4 lbs)
- **Power Source:** USB (via Type-C cable)
- **Material:** Plastic, Paper (for manual), PCB
- **Features:** 3 Independent Alarms, Voice Recording, 12/24 Hour Display, Calendar Function
- **Age Range:** Adult (DIY electronic kit)

9. WARRANTY AND SUPPORT

This product is a DIY solder kit. The warranty typically covers manufacturing defects of individual components, but not issues arising from incorrect assembly or soldering. Please refer to the warranty information provided with your purchase for specific terms and conditions.

For technical support, assembly guidance, or inquiries regarding missing/defective components, please contact BANRIA customer service through the retailer where you purchased the kit. Keep your purchase receipt as proof of purchase.

10. PRODUCT OVERVIEW

Multifunktionaler Sprachaufnahme-Wecker

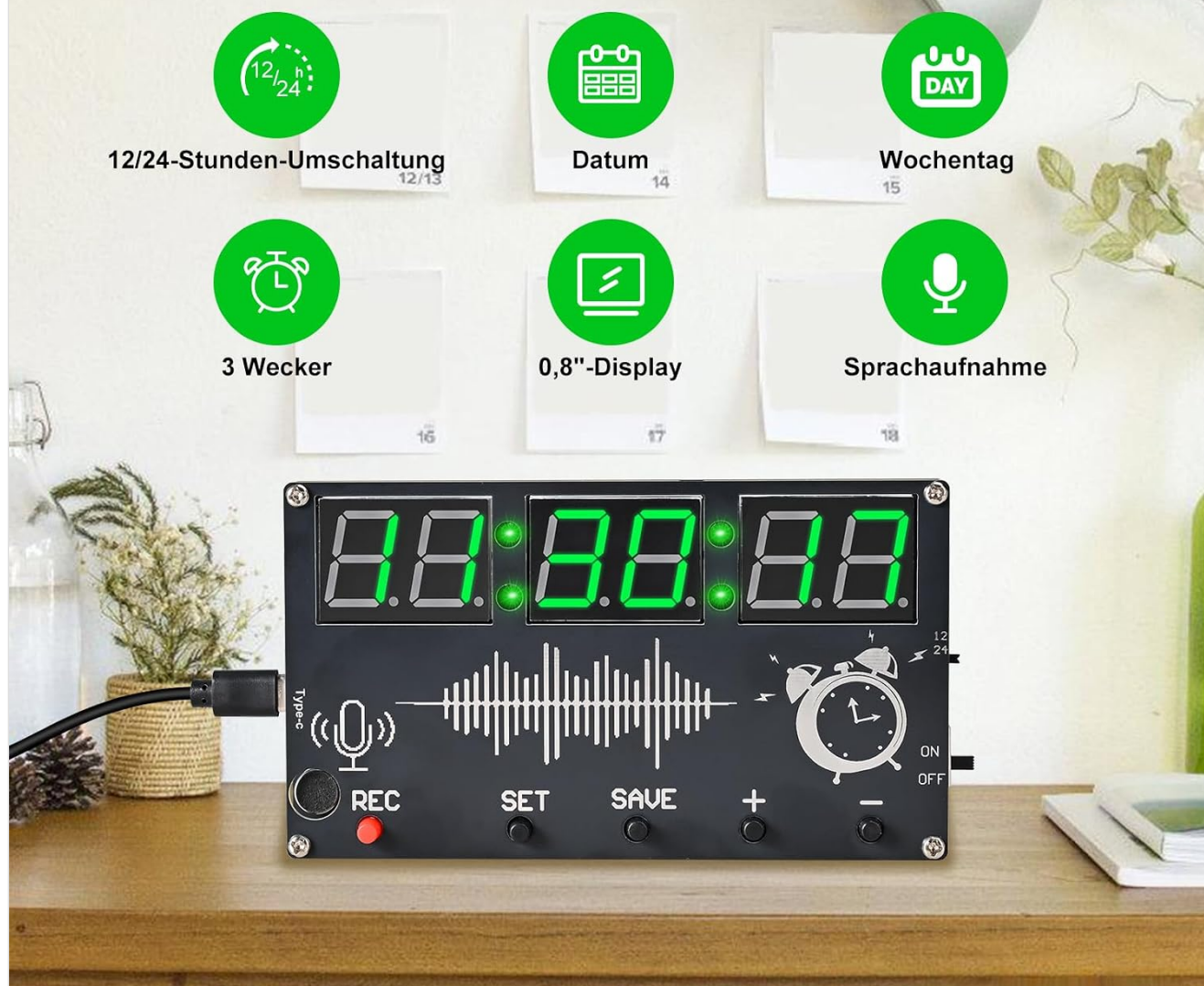


Figure 10.1: Assembled BANRIA Digital Alarm Clock.

This image displays the fully assembled BANRIA DIY Digital Alarm Clock, highlighting its prominent 6-digit LED display, the array of control buttons for various functions, and the integrated voice recording capability.

11. OFFICIAL PRODUCT VIDEOS

No official product videos from the seller were found for this product.

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