AWAVINGCEM EZP2025+

AWAVINGCEM EZP2025+ High-Speed SPI Programmer User Manual

Model: EZP2025+

1. Introduction

This manual provides detailed instructions for the proper use, setup, operation, and maintenance of the AWAVINGCEM EZP2025+ High-Speed SPI Programmer. This device is designed for efficient programming of 24, 25, and 93 series EEPROM, Flash, and BIOS chips. Please read this manual thoroughly before operating the device to ensure optimal performance and safety.

2. Product Overview

The EZP2025+ is a versatile USB-based high-speed programmer capable of reading, writing, erasing, and verifying various serial memory chips. Its compact design and broad chip support make it an essential tool for electronics repair, development, and data recovery. The programmer connects to a computer via USB, drawing power and data through a single cable.

3. Package Contents

Upon unpacking, please verify that all items listed below are present and in good condition. If any items are missing or damaged, contact your vendor immediately.

- EZP2025+ High-Speed SPI Programmer Unit
- USB Cable
- SOP8 150mil Adapter
- SOP8 200mil Adapter
- SOP16 Adapter
- SOP8/DIP8 Test Clip
- SOP8/DIP8 Adapter Board
- CD with Software and Drivers

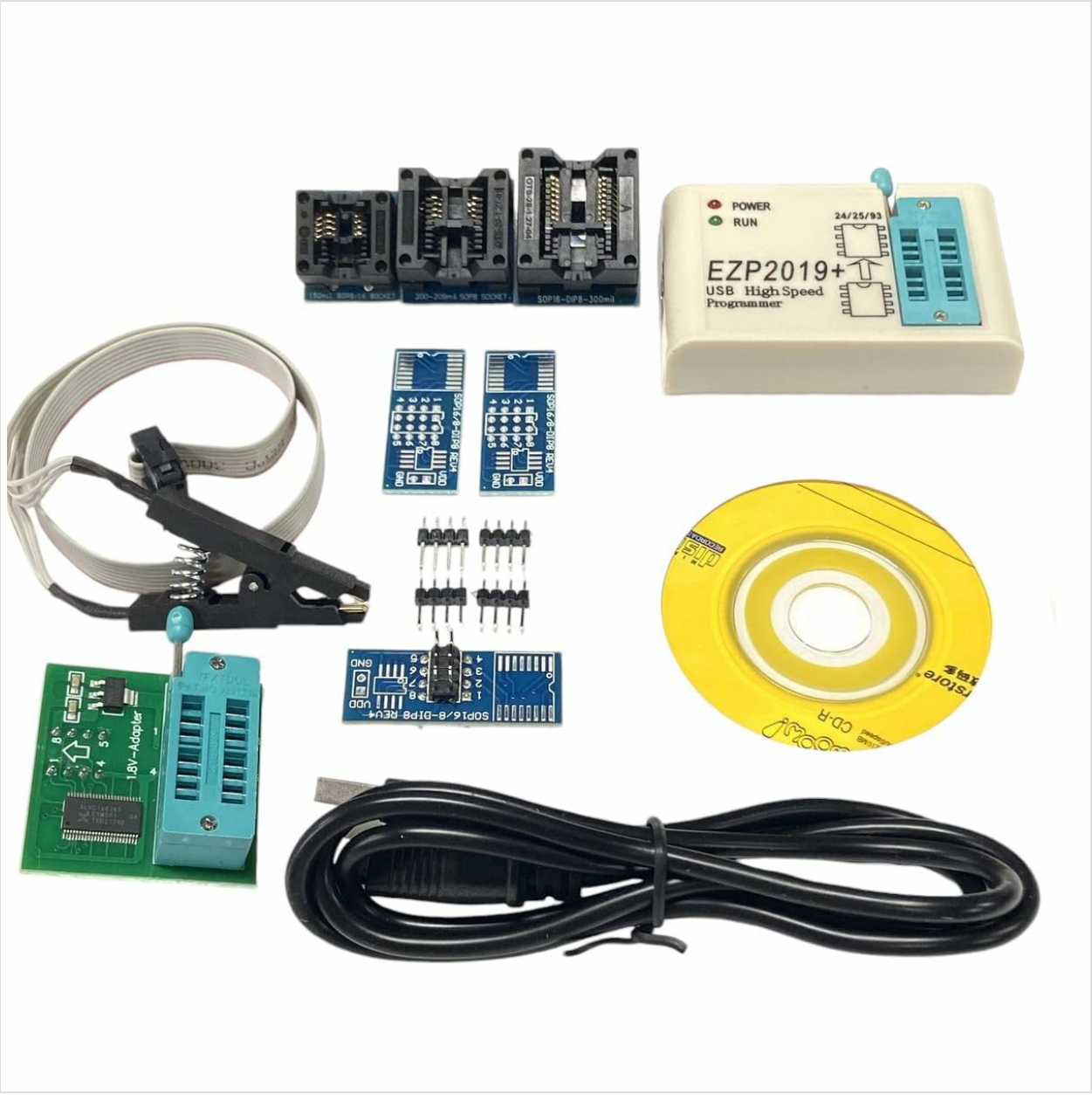

Image 3.1: Contents of the EZP2025+ package, including the programmer unit, various chip adapters, USB cable, and software CD.

4. Setup

1. **Software and Driver Installation:**
    - Insert the provided software CD into your computer's optical drive.
    - Locate and run the installer for the EZP2025+ programming software and drivers.
    - Follow the on-screen prompts to complete the installation. It is recommended to restart your computer after installation.
    - If an optical drive is not available, drivers and software may be downloaded from the manufacturer's official support website (refer to the contact information in Section 8).
2. **Hardware Connection:**
    - Connect one end of the supplied USB cable to the EZP2025+ programmer unit.
    - Connect the other end of the USB cable to an available USB port on your computer. The programmer's power indicator LED should illuminate.
    - Ensure the connection is secure.

5. Operating Instructions

Follow these steps for typical chip programming operations:

1. **Prepare the Chip:**
    - Identify the type and package of the chip you intend to program (e.g., SOP8, DIP8, SOP16).
    - Select the appropriate adapter for your chip. For SOP chips, carefully place the chip into the adapter, ensuring correct pin orientation (Pin 1 usually marked with a dot or notch).
    - For DIP chips, insert the chip directly into the ZIF (Zero Insertion Force) socket on the programmer, ensuring Pin 1 aligns with the socket's Pin 1 indicator. Gently push down the ZIF socket lever to secure the chip.
    - If using the test clip, attach it securely to the chip while it is still on the circuit board, ensuring all pins make good contact.
2. **Launch Software:**
    - Open the EZP2025+ programming software on your computer.
    - The software should automatically detect the connected programmer. If not, check USB connections and driver installation.
3. **Select Chip Model:**
    - Within the software, navigate to the chip selection menu.
    - Manually select the manufacturer and specific model number of your chip. Some software versions may offer an auto-detect feature.
4. **Perform Operation:**
    - **Read:** Click the "Read" button to read the data from the chip into the software buffer. Save the data to a file if desired.
    - **Load File:** To write data, load the desired data file (e.g., .bin, .hex) into the software buffer.
    - **Erase:** Before writing, it is often necessary to erase the chip. Click the "Erase" button.
    - **Write:** After loading the file and erasing the chip, click the "Write" or "Program" button to transfer the data to the chip.
    - **Verify:** Always perform a "Verify" operation after writing to ensure the data on the chip matches the data in the buffer.
5. **Remove Chip:**
    - Once the operation is complete and verified, carefully remove the chip from the adapter or ZIF socket. For ZIF sockets, lift the lever before removing the chip.

6. Maintenance

- **Cleaning:** Keep the programmer unit and adapters clean and free from dust and debris. Use a soft, dry cloth for cleaning. Avoid liquid cleaners.
- **Storage:** Store the programmer and its accessories in a dry, cool place, away from direct sunlight and extreme temperatures.
- **ZIF Socket Care:** The ZIF socket is a precision component. Avoid applying excessive force when inserting or removing chips. Keep the lever clean and ensure it operates smoothly.

- **Software Updates:** Periodically check the manufacturer's website for updated software and drivers to ensure compatibility with new chip models and operating systems.

7. Troubleshooting

- **Programmer Not Detected:**
  - Ensure the USB cable is securely connected to both the programmer and the computer.
  - Try a different USB port or USB cable.
  - Verify that the drivers are correctly installed. Reinstall if necessary.
  - Check your computer's Device Manager for any unrecognized devices.
- **Chip Not Recognized / Programming Failed:**
  - Ensure the chip is inserted correctly into the ZIF socket or adapter, with Pin 1 aligned.
  - Confirm that the correct chip model is selected in the software.
  - Check for bent or dirty pins on the chip or adapter.
  - Ensure the chip is properly secured in the ZIF socket (lever down).
  - If using a test clip, ensure all contacts are firm and stable.
  - The chip may be damaged or write-protected. Try another chip if available.
- **Software Errors / Crashes:**
  - Ensure your operating system is up to date.
  - Reinstall the programming software.
  - Temporarily disable antivirus software during installation or operation if it interferes.

8. Specifications

- **Model:** EZP2025+
- **Interface:** USB 2.0
- **Supported Chip Series:** 24 EEPROM, 25 SPI Flash, 93 EEPROM
- **Operating Voltage:** 5V (via USB)
- **Operating System Compatibility:** Windows XP/Vista/7/8/10 (32-bit/64-bit)
- **Dimensions:** (Refer to product packaging for exact dimensions)

9. Warranty and Support

AWAVINGCEM is committed to providing high-quality electronic components and exceptional customer support. This product comes with a money-back guarantee, reflecting our confidence in its quality and performance.
For technical assistance, troubleshooting, or warranty claims, please contact our customer support team through the following channels:

- **Manufacturer:** AWAVINGCEM
- **Support Website:** www.awavingcem.com/support (Example link, please refer to actual product documentation for correct URL)
- **Email:** support@awavingcem.com (Example email)

Please have your product model (EZP2025+) and purchase details ready when contacting support.