

[Manuals.plus](#) /

› [Ejoyous](#) /

› Ejoyous 4-inch TFT LCD Display Module (ILI9488 Driver, 480x320 HD SPI) Instruction Manual

Ejoyous Ejoyouszqyiowng7d

Ejoyous 4-inch TFT LCD Display Module Instruction Manual

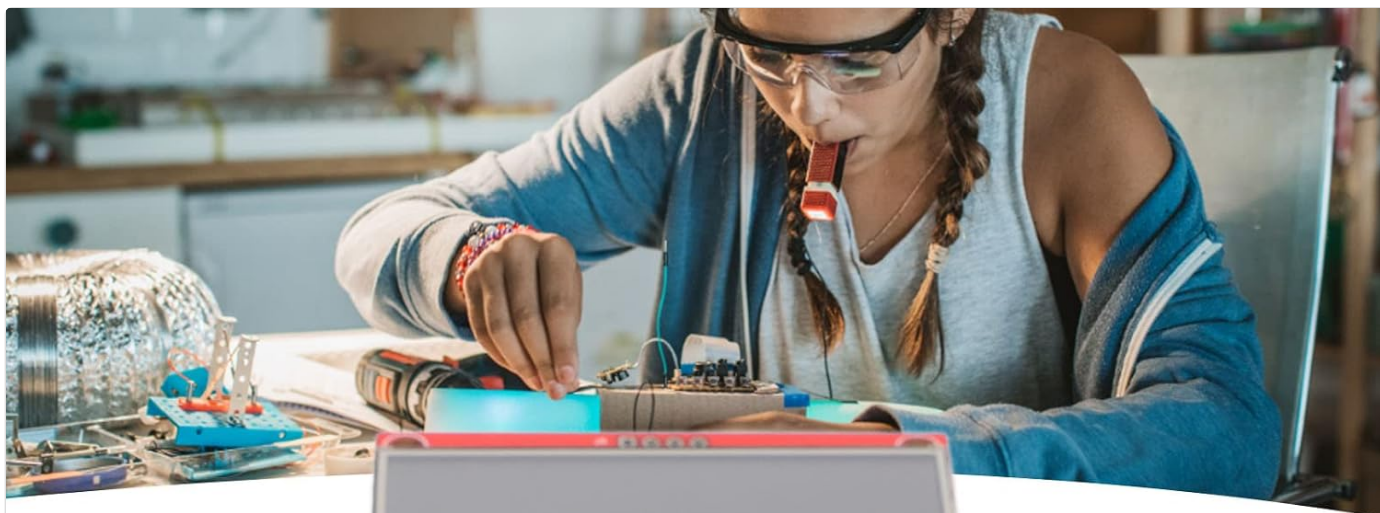
Model: Ejoyouszqyiowng7d | Brand: Ejoyous

INTRODUCTION

This manual provides detailed instructions for the Ejoyous 4-inch TFT LCD Display Module. It covers product features, setup, operation, maintenance, troubleshooting, and technical specifications to ensure proper use and optimal performance.

PRODUCT FEATURES

- **Display Type:** 4.0-inch TFT LCD with 480x320 HD resolution.
- **Driver Chip:** Utilizes the ILI9488 driver for efficient display control.
- **Interface:** Serial Peripheral Interface (SPI) bus, requiring minimal I/O pins for screen illumination.
- **Touch Function:** Optional touch capability for interactive applications.
- **Memory Card Slot:** Integrated memory card slot for easy expansion and data storage, supporting rich sample programs.
- **Versatility:** Can be adapted for various display functions through appropriate wiring.
- **Power Efficiency:** Compatible with 3.3V-5V working voltage, designed for low power consumption.



Equipped with memory card slots, easy to expand the experiment

The Ejoyous 4-inch TFT LCD Display Module features an integrated memory card slot, facilitating easy expansion for various projects and data storage.

SETUP AND CONNECTIONS

This section details the pinout and connection instructions for the display module. Ensure all connections are secure before applying power.

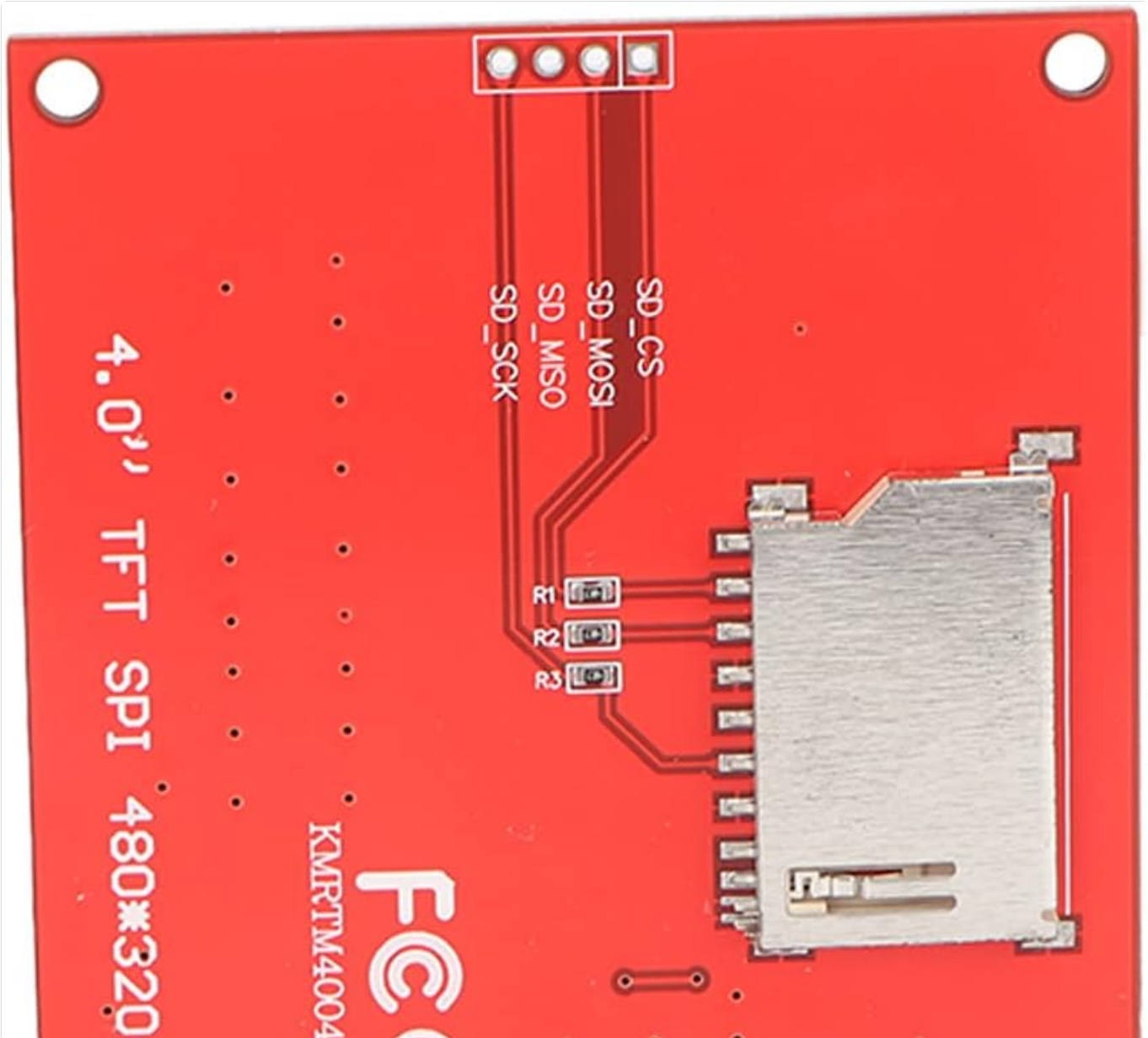
Pin Definitions

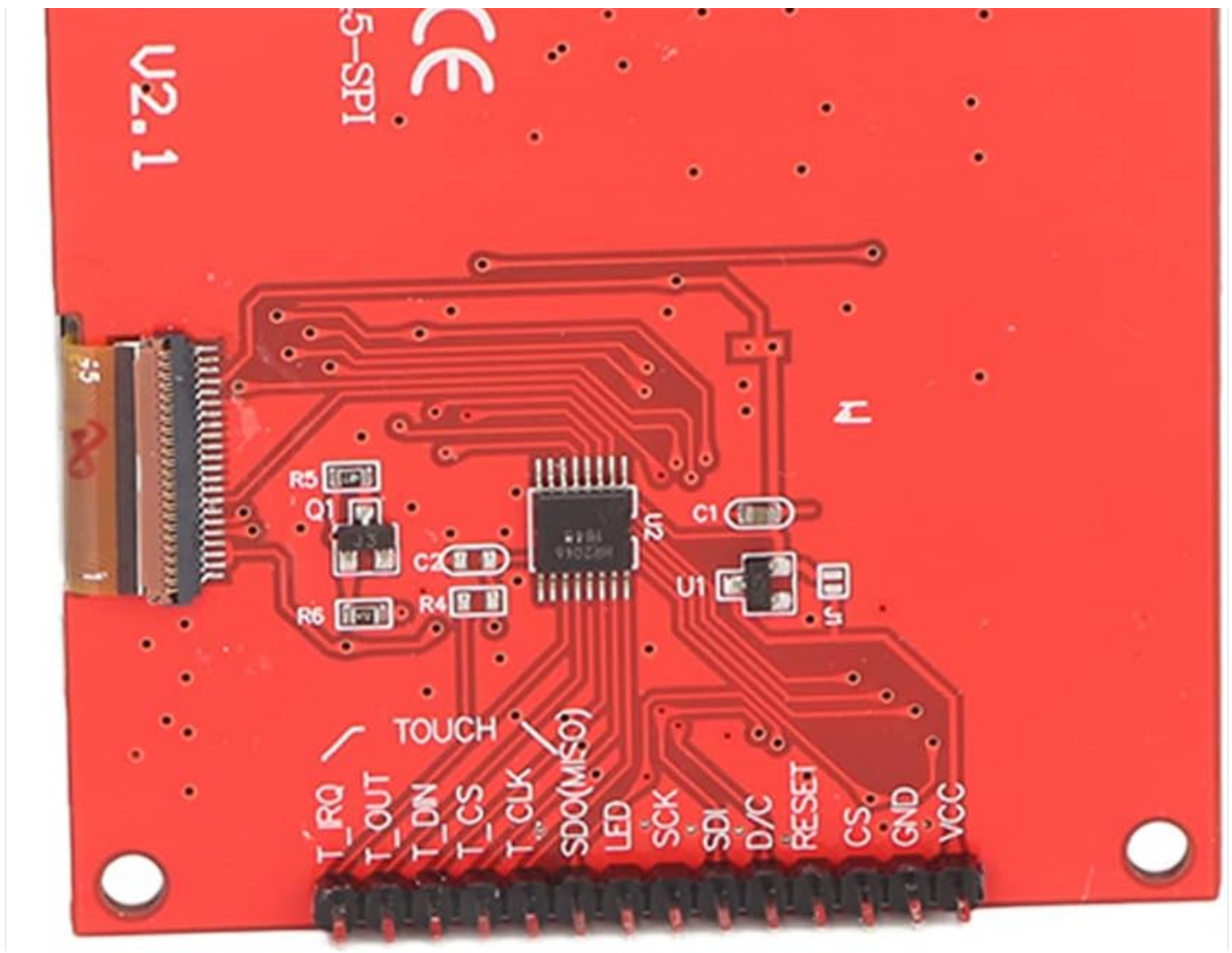
Pin Name	Description
VCC	Power Input (3.3V-5V)
GND	Power Ground
CS	LCD Chip Select
RESET	LCD Reset

Pin Name	Description
DC	LCD Bus Commands/Data Selection
SDI (MOSI)	LCD SPI Display Bus Data Input
SCK	LCD SPI Display Bus Clock
LED	LCD Backlighting Control (High Level Illumination)
SDO (MISO)	LCD SPI Display Bus Data Output (Optional, for read-back)
T_CLK	Touch Panel SPI Bus Clock (if touch function is present)
T_CS	Touch Panel SPI Bus Chip Select (if touch function is present)
T_DIN	Touch Panel SPI Bus Data Input (if touch function is present)
T_DO	Touch Panel SPI Bus Data Output (if touch function is present)
T_IRQ	Touch Panel Interrupt IRQ (if touch function is present)



Technical drawing illustrating the dimensions and pin assignments of the display module. Refer to this diagram for accurate wiring.





Rear view of the module, highlighting the pin headers for connection and the integrated memory card slot.

OPERATING INSTRUCTIONS

The Ejoyous 4-inch TFT LCD Display Module operates via a Serial Peripheral Interface (SPI). To initiate display functionality, connect the module to a compatible microcontroller or development board following the pin definitions provided in the Setup section.

1. **Power Connection:** Connect VCC to a 3.3V-5V power source and GND to ground.
2. **SPI Connection:** Connect SCK, SDI (MOSI), and CS pins to the corresponding SPI pins on your microcontroller.
3. **Data/Command Control:** Connect the DC pin to a digital I/O pin on your microcontroller to switch between command and data modes.
4. **Reset Control:** Connect the RESET pin to a digital I/O pin for software reset control.
5. **Backlight Control:** The LED pin controls the backlight. Apply a high logic level for illumination.
6. **Software Initialization:** Use appropriate libraries or custom code to initialize the ILI9488 driver chip and send display data. Sample programs are often available for common microcontrollers (e.g., Arduino, ESP32).
7. **Memory Card Usage:** If utilizing the memory card slot, ensure proper SPI connections for the SD card interface and use relevant libraries for file system access.
8. **Touch Function (Optional):** If your module includes touch functionality, connect the T_CLK, T_CS, T_DIN, T_DO, and T_IRQ pins to your microcontroller and use a compatible touch driver library.



Using the serial peripheral interface, only a few IOs are needed to light up the screen display

The module connected via its serial peripheral interface, demonstrating how minimal I/O pins are required for display operation.

MAINTENANCE

To ensure the longevity and optimal performance of your Ejoyous 4-inch TFT LCD Display Module, follow these maintenance guidelines:

- **Cleaning:** Gently wipe the display surface with a soft, lint-free cloth. For stubborn smudges, slightly dampen the cloth with distilled water or a specialized screen cleaner. Avoid abrasive materials or harsh chemicals.
- **Handling:** Always handle the module by its edges to avoid touching the display surface or damaging components on the PCB.
- **Storage:** Store the module in a dry, dust-free environment, away from direct sunlight and extreme temperatures.
- **Power Supply:** Ensure the power supply voltage remains within the specified 3.3V-5V range to prevent damage.
- **ESD Protection:** When handling, take precautions against electrostatic discharge (ESD) to protect sensitive electronic components.

TROUBLESHOOTING

If you encounter issues with your display module, refer to the following common troubleshooting steps:

- **No Display/Blank Screen:**
 - Verify power connections (VCC and GND) are correct and within the 3.3V-5V range.
 - Check all SPI connections (SCK, SDI, CS, DC) for proper wiring and continuity.
 - Ensure the LED backlight control pin is set to a high logic level.
 - Confirm that the ILI9488 driver is correctly initialized in your software.
 - Try resetting the module by toggling the RESET pin.
- **Incorrect Colors/Garbled Display:**
 - Double-check your SPI data transmission format and byte order.
 - Ensure the correct display resolution (480x320) is configured in your software.
 - Verify that the DC pin is correctly switching between command and data modes.
- **Touch Function Not Responding (if applicable):**
 - Check all touch panel SPI connections (T_CLK, T_CS, T_DIN, T_DO, T_IRQ).
 - Ensure the touch controller is correctly initialized and calibrated in your software.
- **Memory Card Not Detected:**
 - Verify the SD card SPI connections are correct.
 - Ensure the SD card is properly inserted into the slot.
 - Check if your software includes the necessary libraries for SD card communication.

TECHNICAL SPECIFICATIONS

Parameter	Value
Brand	Ejoyous
Model Number	Ejoyouszqyiowng7d
Display Size	4.0 inches
Resolution	480x320 pixels
Driver Chip	ILI9488
Interface	SPI (Serial Peripheral Interface)
Working Voltage (VCC)	3.3V - 5V
Touch Function	Optional
Memory Card Slot	Yes
Item Weight	2.96 ounces (approx. 84 grams)
Package Dimensions	5.51 x 3.54 x 1.18 inches (approx. 14 x 9 x 3 cm)

WARRANTY AND SUPPORT

This Ejoyous product is subject to the retailer's return policy. For specific warranty details and support, please refer to the

purchase platform or contact the seller directly.

- **Return Policy:** Typically, a 30-day refund/replacement policy applies from the date of purchase. Please check with your retailer for exact terms.
- **Manufacturer:** Ejoyous
- **For Assistance:** If you require technical assistance or have questions regarding the product, please reach out to the seller "Huullkq" via the Amazon platform or consult the Ejoyous brand store for further resources.