



# ELECROW ESP32 HMI Display Touch Screen LCD User Manual

[Home](#) » [ELECROW](#) » ELECROW ESP32 HMI Display Touch Screen LCD User Manual 

## Contents

- [1 ELECROW ESP32 HMI Display Touch Screen LCD](#)
- [2 Screen Buttons and Interfaces](#)
- [3 Inch HMI Display](#)
- [4 Package List](#)
- [5 Screen Buttons and Interfaces](#)
- [6 Parameters](#)
- [7 Safety Instructions](#)
- [8 Documents / Resources](#)
  - [8.1 References](#)
- [9 Related Posts](#)



**ELECROW ESP32 HMI Display Touch Screen LCD**



Thank you for purchasing our product. Please read this user manual carefully before use and keep it properly for future reference.

## Screen Buttons and Interfaces

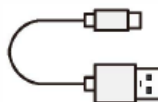
Screen appearance varies by model, and diagrams are for reference only. Interfaces and buttons are silk screen labeled, use the actual product as a reference.

## Inch HMI Display

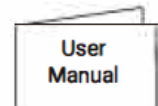
### Package List



1x  
ESP32 Display



1x  
USB-A to Type-C Cable



1x  
User Manual



1x  
Resistive Touch Pen  
(5-inch and 7-inch display do not  
come with a resistive touch pen.)



1x  
Crowtail/Grove to 4pin DuPont Cable

The following list diagram is for reference only. Please refer to the actual product inside the package for details.

### IMPORTANT SAFETY WARNING!

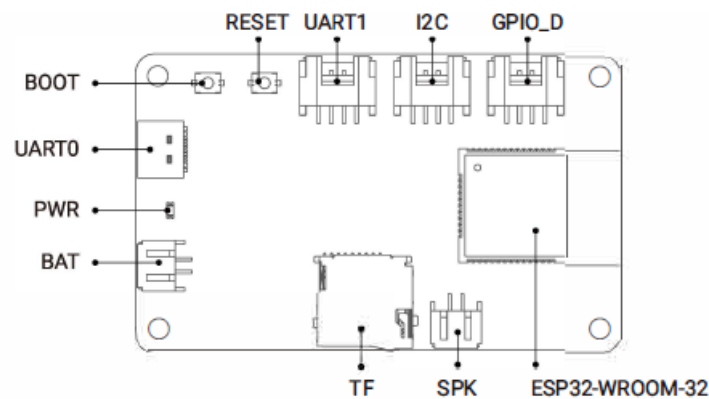
- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be done by children without supervision.

- **WARNING:** Use the detachable supply unit provided with this appliance only.

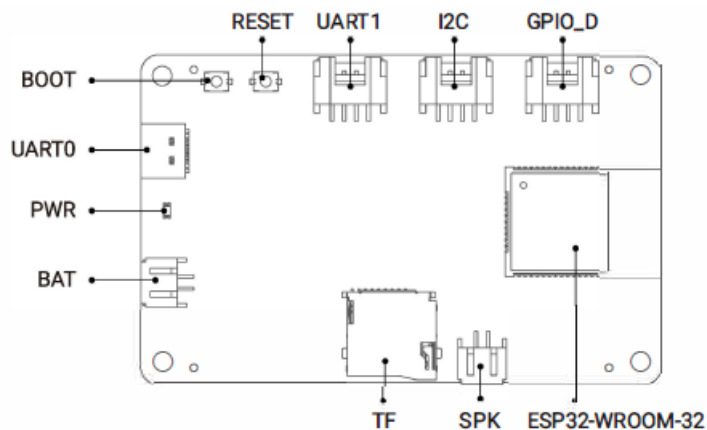
Information on the disposal for Waste Electrical & Electronic Equipment (WEEE). This symbol on the products and accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper disposal for treatment, recovery, and recycling, please take these products to designated collection points where they will be accepted on a free-of-charge basis. In some countries, you may be able to return your products to your local retailer upon the purchase of a new product. Disposing of this product correctly will help you save valuable resources and prevent any possible effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest collection point for WEEE.

## Screen Buttons and Interfaces

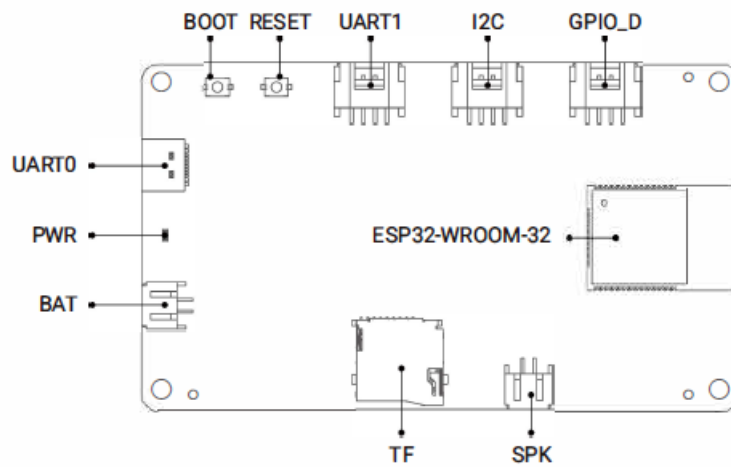
### 2.4 Inch HMI Display



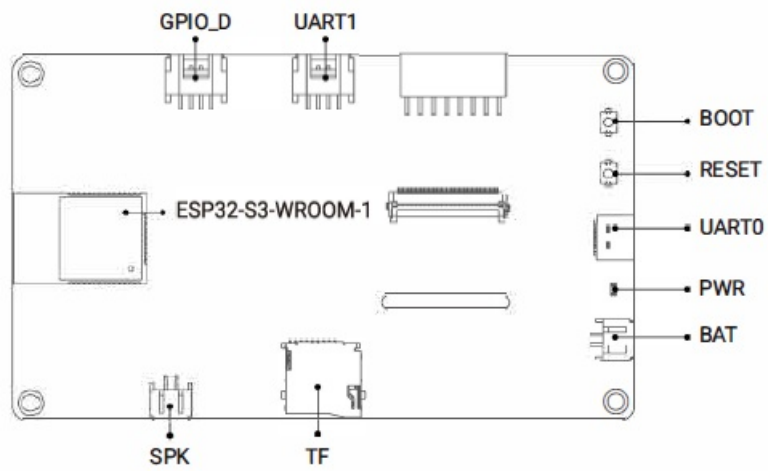
### 2.8 Inch HMI Display



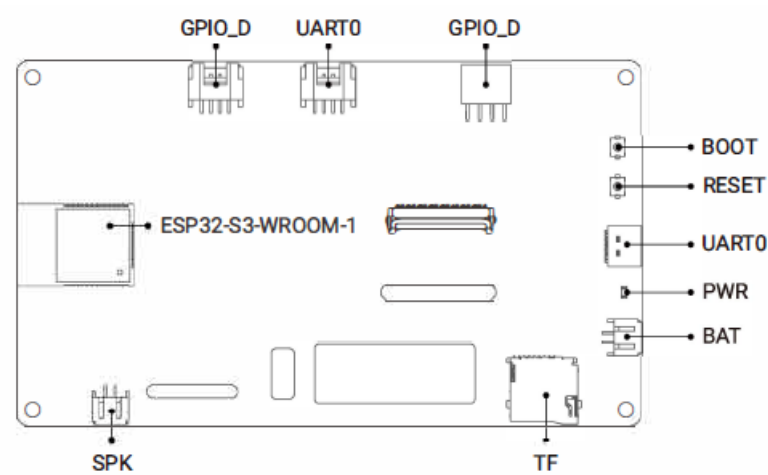
### 3.5 Inch HMI Display



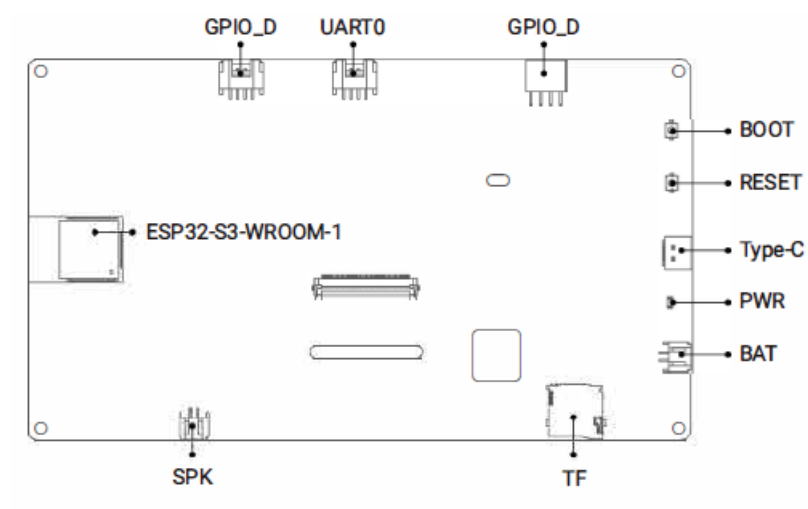
### 4.3 Inch HMI Display



### 5.0 Inch HMI Display



### 7.0 Inch HMI Display



## Parameters

<b>Size</b>	<b>2.4"</b>	<b>2.8"</b>	<b>3.5"</b>
<b>Resolution</b>	240*320	240*320	320*480
<b>Touch Type</b>	Resistive Touch	Resistive Touch	Resistive Touch
<b>Main Processor</b>	ESP32-WROOM-32-N4	ESP32-WROOM-32-N4	ESP32-WROOM-32-N4
<b>Frequency</b>	240 MHz	240 MHz	240 MHz
<b>Flash</b>	4MB	4MB	4MB
<b>SRAM</b>	520KB	520KB	520KB
<b>ROM</b>	448KB	448KB	448KB
<b>PSRAM</b>	/	/	/
<b>Display Driver</b>	ILI9341V	ILI9341V	ILI9488
<b>Screen Type</b>	TFT	TFT	TFT
<b>Interface</b>	1*UART0, 1*UART1, 1*I2C, 1*GPIO, 1*Battery	1*UART0, 1*UART1, 1*I2C, 1*GPIO, 1*Battery	1*UART0, 1*UART1, 1*I2C, 1*GPIO, 1*Battery
<b>Speaker Jack</b>	YES	YES	YES
<b>TF Card Slot</b>	YES	YES	YES
<b>Active Area</b>	36.72*48.96mm(W*H)	43.2*57.6mm(W*H)	48.96*73.44mm(W*H)

Size		5.0"	7.0"
Resolution	480*272	800*480	800*480
Touch Type	Resistive Touch	Capacitive Touch	Capacitive Touch
Main Processor	ESP32-S3-WROOM-1- N4R2	ESP32-S3-WROOM-1- N4R8	ESP32-S3-WROOM-1- N4R8
Frequency	240 MHz	240 MHz	240 MHz
Flash	4MB	4MB	4MB
SRAM	512KB	512KB	512KB
ROM	384KB	384KB	384KB
PSRAM	2MB	8MB	8MB
Display Driver	NV3047	ILI6122 + ILI5960	EK9716BD3 + EK73002ACGB
Screen Type	TFT	TFT	TFT
Interface	1*UART0, 1*UART1, 1*GPIO, 1*Battery	2*UART0, 1*GPIO, 1*Battery	2*UART0, 1*GPIO, 1*Battery
Speaker Jack	YES	YES	YES
TF Card Slot	YES	YES	YES
Active Area	95.04*53.86mm(W*H)	108*64.8mm(W*H)	153.84*85.63mm(W*H)

## Expansion Resources



For More Details  
Please Scan the QR Code.

- Schematic Diagram
- Source Code
- ESP32- S3-WROOM-1 N4R8 Datasheet
- Arduino Libraries
- 16 learning Lessons for LVGL
- LVGL Reference

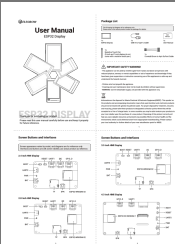
## Safety Instructions

- To ensure safe use and avoid injury or property damage to yourself and others, please follow the safety instructions below.
- Avoid exposing the screen to sunlight or strong light sources to prevent affecting its viewing effect and lifespan.
- Avoid pressing or shaking the screen hard during use to prevent the loosening of internal connections and components.
- For screen malfunctions, such as flickering, color distortion, or unclear display, stop use and seek professional repair.
- Before repairing or replacing any equipment components, make sure to turn off the power and disconnect from the device.

## Contact Technical Support

E-mail: [techsupport@elecrow.com](mailto:techsupport@elecrow.com)

## Documents / Resources

	<p><b><a href="#">ELECROW ESP32 HMI Display Touch Screen LCD</a></b> [pdf] User Manual</p> <p>ESP32 HMI Display Touch Screen LCD, ESP32, HMI Display Touch Screen LCD, Display Touch Screen LCD, Touch Screen LCD, LCD</p>
-------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## References

- [User Manual](#)