1.75 inch ESP32-S3 TAIJI VIEWE PI

operating instruction

Table of Contents

Product overview

- ✧ Main control chip: ESP32-S3-N16R8 (dual-core MCU, integrated Wi-Fi and Bluetooth BLE5.0, main frequency 240MHz, 520KB SRAM, 8MB PSRAM, 448KB ROM, 16MB Flash).
- ✧ Display: Resolution 466x466, capacitive touch.
- ✧ Module functions: including LCD display screen, backlight control, touch screen control, I2S digital microphone, I2S digital-to-analog conversion, TF card interface, wireless power supply circuit.
- ✧ Development environment: Supports Arduino IDE, ESP IDE, MicroPython, PlatformIO and other secondary development, and supports LVGL for UI development.
- ✧ Manufacturing process: CNC shell, delicate and exquisite.

product function

- Computer secondary screen function (AIDA64), built-in 5 styles
- The audio spectrum function is built-in with multiple sections for switching
- MP3 music playback function, you can add MP3 files, can decode 320K high quality MP3
- The electronic photo frame function allows you to add your own photos
- MJPEG playback capability, you can add MJPEG files yourself
- The car G value dial has a built-in gyroscope to detect the G value according to the gyroscope sensor

- The theme clock display function is set to the international time zone by default, which can be changed to the Chinese time zone
- Wireless power function (supporting QI protocol) and wireless charging bank to achieve real wireless effect
- Real-time weather function, get the weather through WIFI network
- Later product function upgrade

Screen parameters

Item	Specification	Unit	Remark
Display type	AMOLED	-	-
Screen Size	1.75	Inch	Diagonal
Resolution	466*466	Dots	-
Module Power Consumption	-	Watt	
Active Area	Φ43.76	mm	-
Pixel pitch (W*H)	82.2	mm	-
Module Size (W*H*D)	45.93(W)*46.35(H)*0.8(D)	mm	
Driver IC	CO5300	-	
Interface Mode	MIPI/QSPI	-	
Display mode	Normal Black	-	
Luminance	700	cd/m^2	Typ.
Viewing Direction	ALL	O'clock	-
Display Color	16.7M	Colors	24bits
PPI	273	-	
TP IC	CST9217	-	
TP Outline(assembly)	48.16(H) ×48.16(V)×1.1(T)	mm	
TP Viewing Area	Φ44.16	mm	

direction for use

distribution network

The AIDA64 secondary screen and weather clock of this device need to be used in network.

After powering on, the device will automatically create an Access Point (AP) named My-Ap with a password of 12345678. Connect your phone to this AP, and after a moment, a network setup page will appear. The system will automatically search for available hotspots in your current environment, select your hotspot, and enter the password to complete the setup. Once the setup is complete, the screen will display an IP address, which you can view in the settings under the WIFI page.

Note: Some mobile phones will automatically disconnect from the hotspot and use the 5G network once they find that the hotspot cannot be connected to the Internet. In this case, you need to connect to the AP again. If the network configuration page does not pop up after connecting to the AP, you can also open it by entering 192.168.4.1 in the mobile browser.

Basic operations

1. Display the main menu

In the secondary screen, pickup, electronic photo frame, MJPEG playback, balance ball, clock and other functions, swipe up from the touch area to call up the main menu.

On the playlist screen of the music playback page, click the "○" icon at

the top to call up the main menu

On the Settings page, click the "<" icon to call up the main menu

Click the main menu to enter each function page

2. Operation of each function

Secondary screen: You can swipe left and right in the screen area to switch between different secondary screen styles.

Theme clock: No, simple style clock display.

Balance ball: Use the gyroscope to sense the balance and control the direction of the ball's rolling. Click to appear the positioning icon, and long press to reset the balance ball to the center of the screen.

MJPEG playback: Swiping left and right in the screen area switches between playing the next or previous file.

Album: Swipe left and right in the screen area to switch between playing the next or previous file.

Music playback: It is divided into a playback page and a menu/list page. By default, the system enters the menu/list page, which automatically scans and lists mp3 files in the music directory on the TF card. Clicking on the corresponding name will play the file and switch to the playback page. On the playback page, tapping anywhere on the screen will bring up the menu/list page. If no action is taken within 3 seconds, the menu/list page will automatically hide

Audio spectrum pickup: None

Settings: All the setting functions are carried out in the Settings page. In order to extend the service life of flash, the modification made in the Settings page will be saved to the flash when exiting the Settings page.

The second control mode: Web control

After the network is connected, enter the Settings page, click WiFi, enter the WiFi page, slide to the bottom to find the current connection IP address, enter the IP address of this device in the computer browser to enter the web control page. (Note: you must be in the same network to access)

Detailed instructions for each function

1. Auxiliary screen function of computer (AIDA64)

1. Find an activated AIDA64 client (by yourself).
2. After opening AIDA64, click [File]> [Settings]> [LCD] in the upper left corner, and select Remote Sensor. Note: In the Settings interface, you can make some routine Settings such as language
3. Set port 80, resolution 1280x800 at will, and check [Enable RemoteSensor LCD support].
4. Then click [LCD Project], click [Import] in the upper right corner, and then select the aida_remote_1.85.rslcd file provided by our file.
5. After the import, you still need to manually configure some settings. Since each user's CPU, GPU, motherboard, hard drive, and network card can vary, you need to set each parameter individually. The 8 parameters are: CPU usage, CPU frequency, CPU temperature, CPU fan, GPU usage, GPU frequency, GPU temperature, and GPU fan. Click on the corresponding parameters at the bottom of the interface to make the necessary adjustments. Note that you must not modify the text in "Show Label," and the "Show unit" field must be filled with "^" (without

quotation marks), otherwise the device will not be detected.

6. Click OK after all changes are completed, and minimize AIDA64. You can set it to start automatically at boot (Settings, General, Run AIDA64 at boot time).

7. Enter the IP address of the screen through the web page, and set your computer's IP address (that is, the IP address of the AIDA64 running computer) in the "Secondary Screen Host Address" at the bottom, and save it.

If the local port 80 is occupied, you need to add a colon and a custom port. For example:

192.168.0.100 uses the host address 192.168.0.100 and the default port 80

192.168.0.100:9223 Use the host address 192.168.0.100 and port 9223 Note that the colon is the English colon ":". 192.168.0.100:9223 Use the host address 192.168.0.100 and port 9223 Note that the colon is the English colon ":".

8. The firewall allows AIDA64 to access the network, or manually open the TCP80 port (or your custom port). Important! Refer to the link: https://jingyan.baidu.com/article/af9f5a2d2ea83543140a4584.html

After the setup is complete, switch the screen to the AIDA64 function window to display the computer status information.

2. Audio spectrum pickup function

Gain correction can be performed within the Web page, with a total of four levels. Adjust to the appropriate level to ensure that the spectrum is almost invisible when at rest.

3. MP3 music playback function

Put mp3 files with a sampling rate of 320kbps or less and a sampling rate of 48000 or less into the music directory of the tf card (restart the device each time you unplug the card and plug it back into the device, as below).

4. Electronic photo frame function

Put the 466 x 466 JPEG file into the pic directory of the TF card.

5. MJPEG playback function

Use the mjpeg conversion tool to convert the video to be played into an MJPEG file with 360*360, FPS of 25 and video quality of 7. Copy the file to the mjpeg directory of the TF card.

6. Real-time weather function

You can use the city code after configuring it in the Web page. Enter the city name in the web page and click save to automatically generate the city code. However, it takes time to refresh the screen. After exiting the weather interface, you can enter the weather interface again. After the network refresh is successful, you will get the corresponding city weather input.

7. Clock display function

When entering the clock screen, if it is a Chinese version, it will default to the China time zone (+8), and if it is an international version, it will default to the international time zone (+0). You can set the time offset in

Settings> Language (LANGUAGE)> Time Zone (Timezone). (Later, it will be updated to allow custom dial)

8. G value table function

To use the G value table, you need to have the gmeter.jpg resource file in the night7 directory of the TF card. If you don't have it, please download it from the address I provided

For the first use, you need to record the installation information of the device. Please place the device and keep it still. Click the screen, and then click the calibration button appearing in the middle of the screen for calibration. Keep still during this process and do not shake the device

After calibration, it can be used normally.

In order to have a better effect on daily driving, the G value of the central ring mapping is 0.3g

Product display and size description

Note: Wireless power supply is not included in the product

CNC metal housing, available in two colors

Metallic Burgundy

Metallic Silver

Display: 1.8 inches	Main Controller: ESP32 - S3
Outer Diameter: 55 mm	Thickness: 8.8 mm
Touch: Capacitive Touch	Power Supply: Wired/Wireless