AiPi-Knob Firmware Usage Guide

AiPi-Knob is a rotary encoder driver board (referred to as Knob) designed by the Ai-Thinker open source team, which integrates 1.28 circular screen, pin interface, rotary encoder, RGB light, built-in audio, infrared emission and infrared reception, download pin, IO pin, serial port download USB interface, and USB interface. AiPi-Knob factory has burned the firmware, and made four demonstration interface: washing machine interface, RGB light interface, TV control interface, air conditioning control interface.

The Ai-M61-32S module equipped with a wealth of peripheral interfaces, specifically include DVP, MJPEG, Display, AudioCodec, USB2.0, SDU, Ethernet (EMAC), SD/MMC (SDH), SPI, UART, I2C, I2S, PWM, GPDAC, GPADC, ACOMP and GPIO. AiPi-SCP-Knob integrates a screen pin interface, knobs, RGB lights, built-in audio, infrared emission and infrared reception, download pin, IO pin, serial download USB interface, and an outgoing USB interface.

1. Firmware burning

1) Connect cables to the serial port

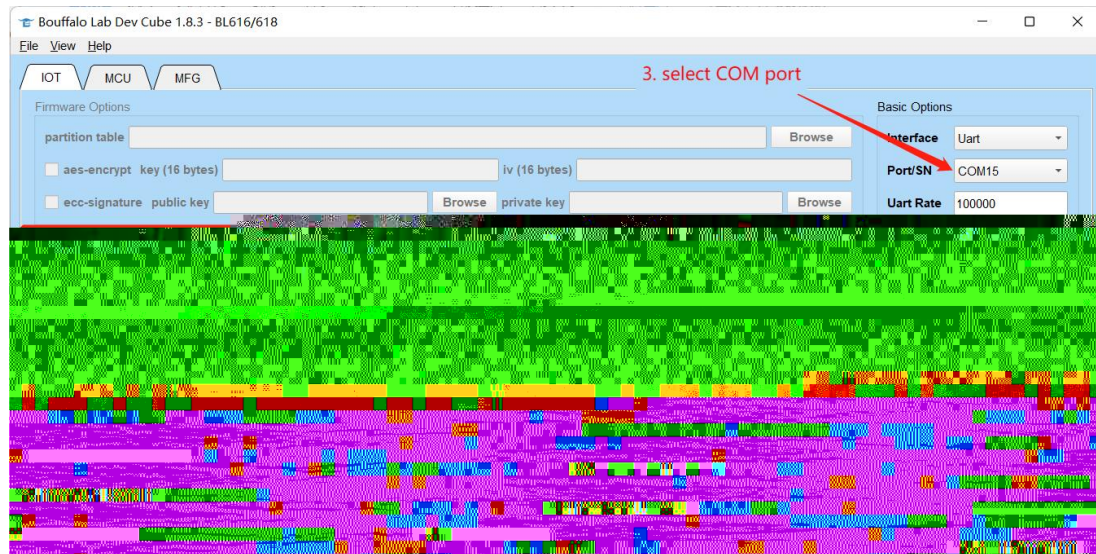| TTL Tool	AiPi
3.3V	3.3V
TXD	RX
RXD	TX
GND	GND

2) Burn

Burning tool Download: Click to download

Firmware address:

After the burning tool starts, press and hold down the "download button" and then press the "reset button" and release it to enter the burning mode.

Open BLDevCube.exe, Select BL616/618 and click Finish.

Note: After the firmware is burned, you need to press the reset button once before the program can run.

Steps:

The Ampa-Knob is equipped with a speaker and a 1.28-inch round LCD display, along with a round Knob.

Firmware features:

1 Screen drive display, display the functional interface, and interact with users.
2 Firmware can be broadcast with speakers, and various interactive sound effects can be played through speakers.
3 knob key control, you can control the command action through a variety of ways, rotary switch, short press to confirm, long press to exit.

Function display

After the system is powered on, the screen automatically starts, and a startup animation with sound output is displayed on the screen.


After the startup animation is finished, the main function page is displayed. First, press the washing machine control terminal to enter the washing machine function interface. There are multiple laundry modes to choose from.
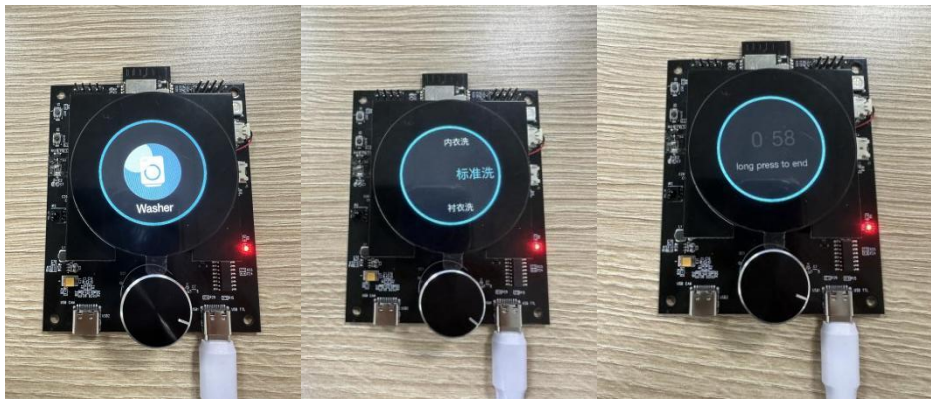

The second is the TV control end, short press to enter the TV station selection interface, rotate the knob and short press to select the station, at this time the remote control interface is displayed, there are various buttons, you can rotate and short press the knob to select, key buttons include volume adjustment, channel adjustment, etc. Hold down to exit the current screen.
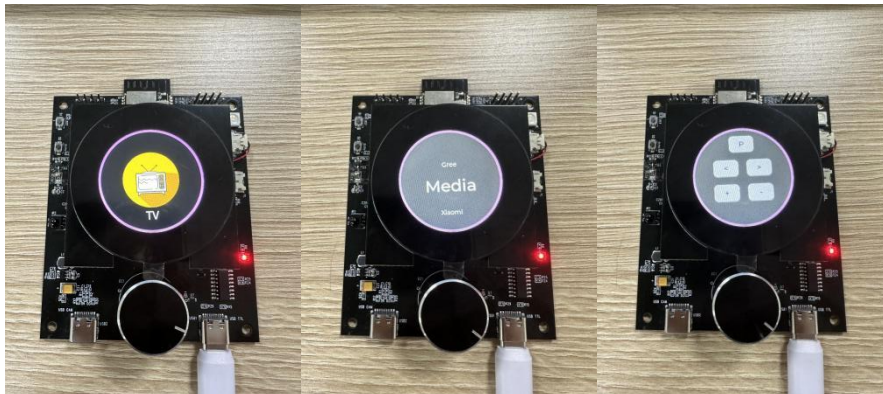
Then the control end of the lamp, press to enter the RGB lamp control interface, the default brightness is 50% yellow light, rotate the knob to change the brightness, press to change the color of the lamp, and press and hold to exit the current interface.
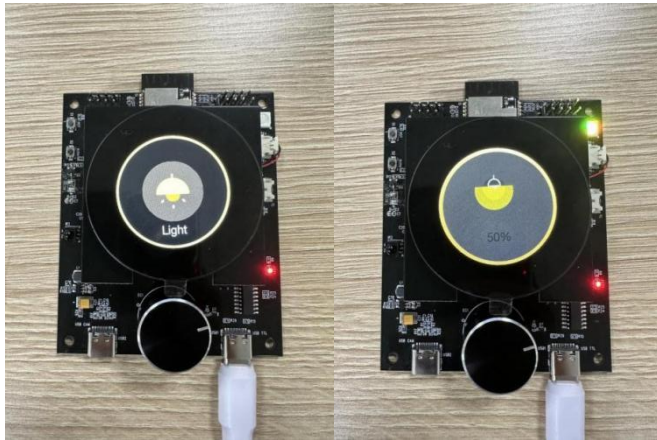
Finally, press the control end of the air conditioner to enter the control interface of the air conditioner, rotate the knob to select the degree of the air conditioner, press short to turn on the light of the air conditioner, and press long to exit the current interface.
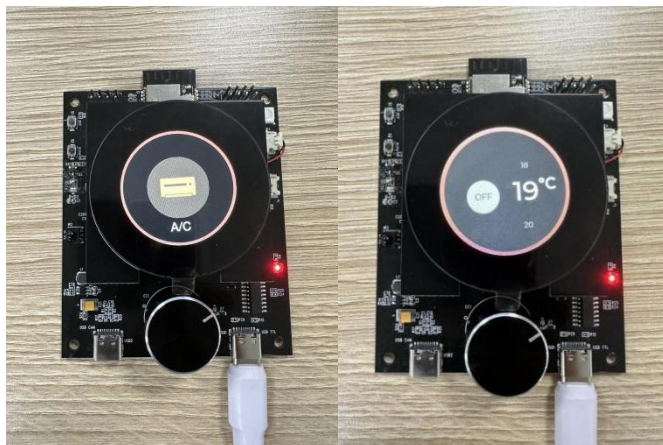
Standby: When the power is turned on, if no operation is performed for a period of time, the standby mode will be automatically entered. At this time, a dynamic screen protection wallpaper will appear. If you press the knob arbitrarily, the standby mode will be exited and the state before standby will be entered.