## Gamepad V7RC Open Source

## - · File List

Table 1 Gamepad V7RC file list

Filename	Content
Gamepad_V7RC. ino	Main function

Table 1 shows Gamepad\_V7RC file list, which includes only one main file and will be described in the following chapter.

## 二、 Gamepad\_V7RC Main Function

Gamepad\_V7RC. ino is implemented based on ESP32-BLE-Gamepad library (<a href="https://github.com/lemmingDev/ESP32-BLE-Gamepad">https://github.com/lemmingDev/ESP32-BLE-Gamepad</a>). In setup stage, Gamepad\_V7RC initializes ESP32-BLE-Gamepad and ADS1115. When entering loop stage, it derives the voltage levels respectively for x axis and y axis of left and right joysticks. The derived voltages are further converted to adapt the control ranges of the joysticks of ESP32-BLE-Gamepad. Finally, it invokes setAxes API to set joystick of ESP32-BLE-Gamepad.

## 三、 Gamepad\_V7RC Installation

After flashing Gamepad program, turn on the power of gamepad. Next, use smartphone to connect to gamepad with id=ESP32 BLE Gamepad via Bluetooth (as shown in Figure 1). After confirming the connection status, open V7RC app and enter control center. In the control center, select TANK mode (as shown in Figure 2) and scroll down to enable Gamepad mode (as shown in Figure 3). Finally, navigate to control interface and use gamepad to replace the joystick control (as shown in the video <a href="https://youtube.com/shorts/jwoA1jsuKi0">https://youtube.com/shorts/jwoA1jsuKi0</a>).



Figure 1. connect gamepad bluetooth

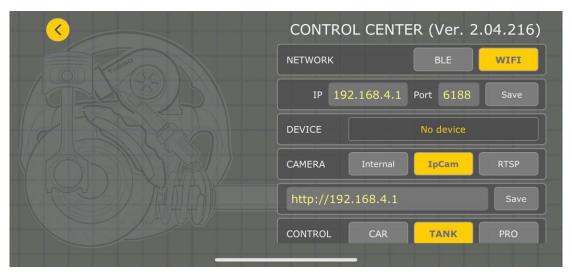


Figure 2. TANK mode

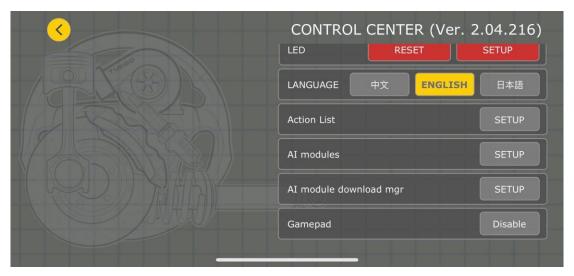


Figure 3. V7RC Gamepad mode setting