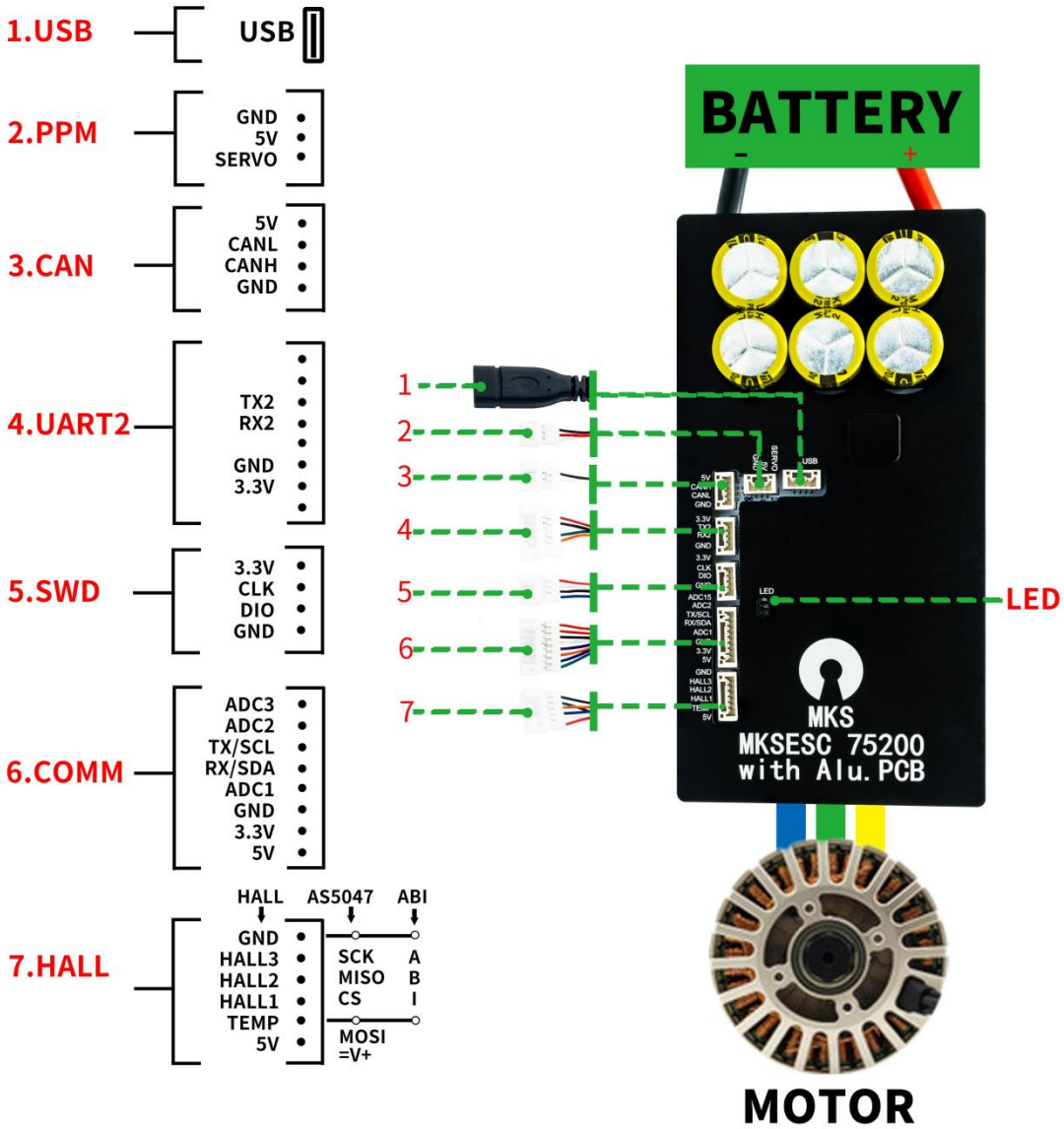
Makerbase MKSESC 75200 Dual Drive Dual Motor Test

Note: MKESC75 motherboard recommends using VESC TOOL V3.0, firmware version V5.2.

Dual-drive collocation can use any two VESC motherboards for CAN connection, such as a VESC6 and a VESC75 are also possible.

Part 1 Hardware Introduction

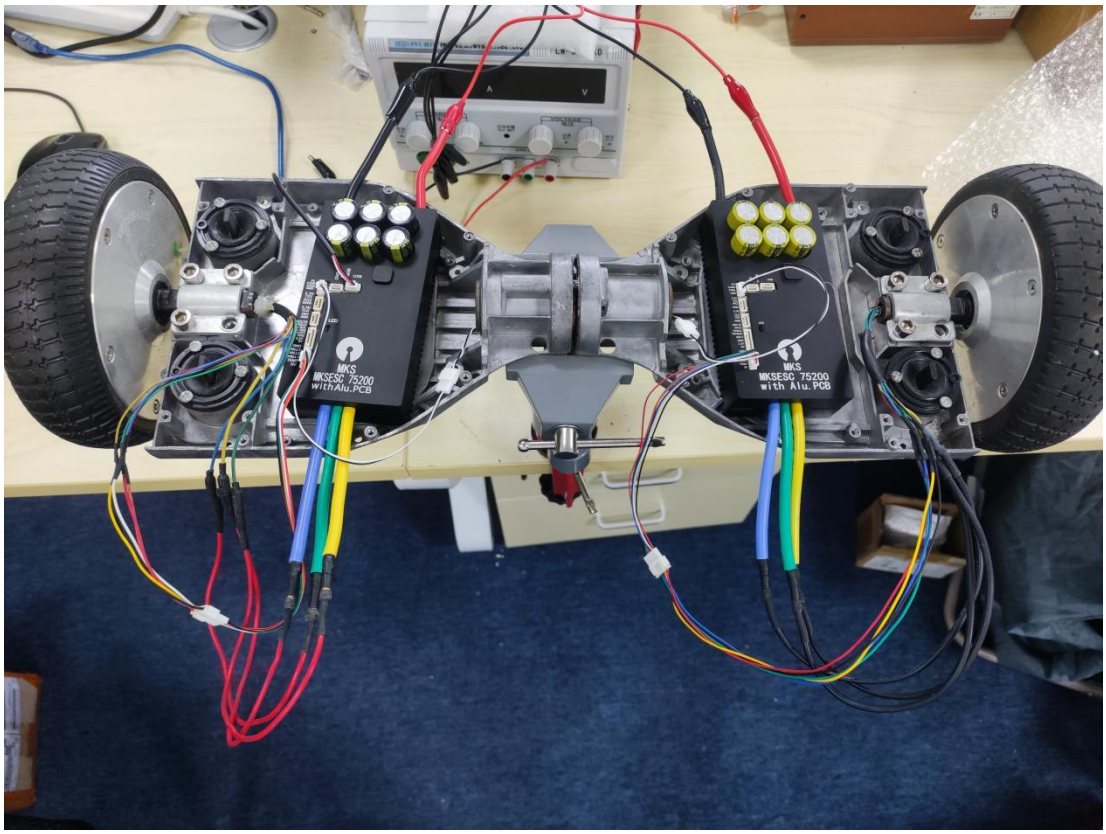
1.1 Hardware interface



1.2 Hardware List

Order	Product name	quantity
1	MKSESC 75200 V2.0 motherboard	2
2	6.5 inch hub motor (with Hall)	2
3	DC 36V power supply	1
4	Type-C USB data cable	1

The hardware list is shown in the figure below:

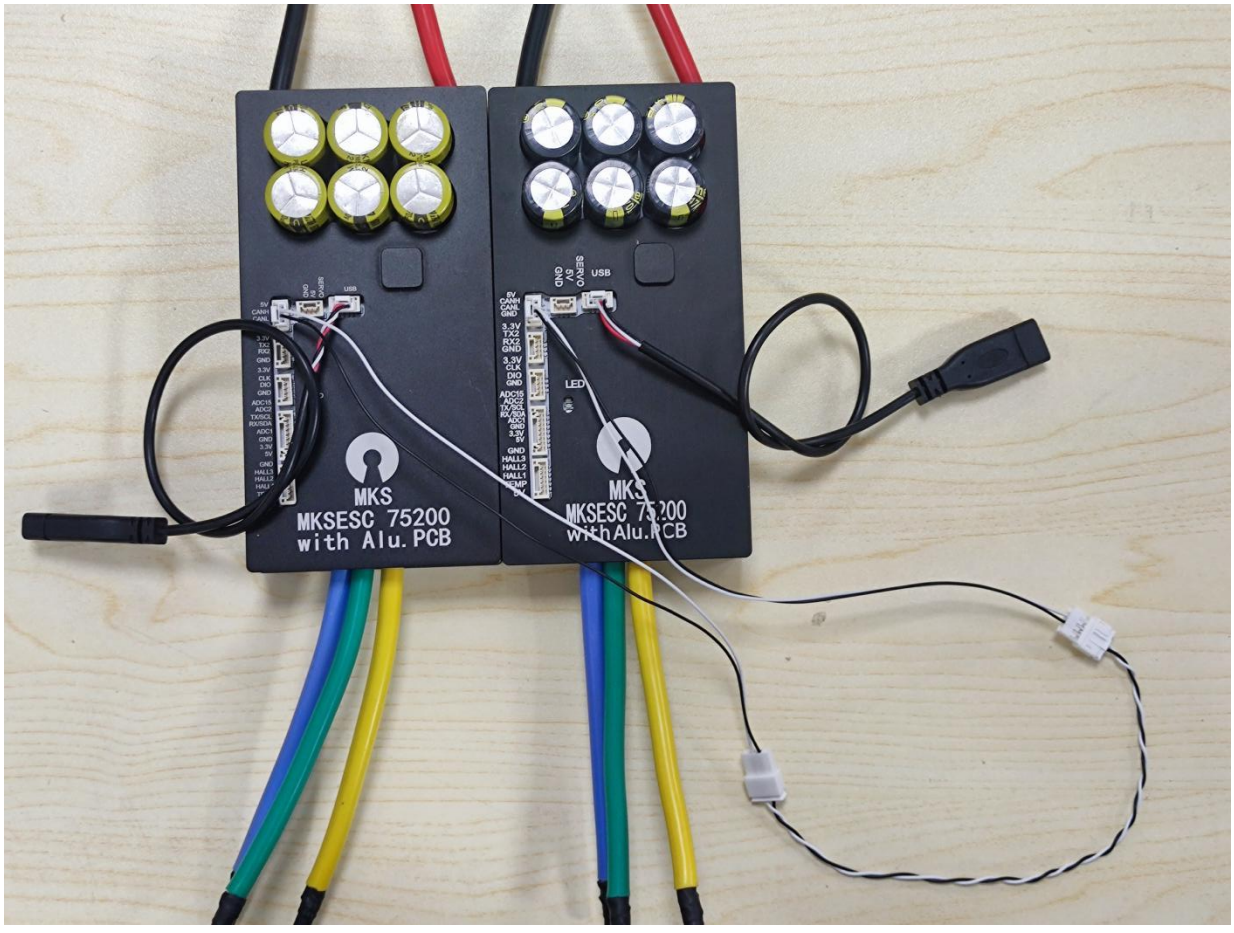


Part 2 Hardware connection

1. Connect the three-phase wires of the two motors and the Hall sensor wires to the two VESC main boards respectively;
2. Connect one end of the USB cable to the VESC motherboard, and the other end to the PC;
3. The 36V power supply is connected to the motherboard;
4. The connection relationship between MKSESC 75200 V2.0 motherboard and MKSESC 75200 V2.0 motherboard pins, As shown in the table below:

MKSESC 75200 V2.0 motherboard 1	MKSESC 75200 V2.0 motherboard 2
CANH	CANH
CANL	CANL

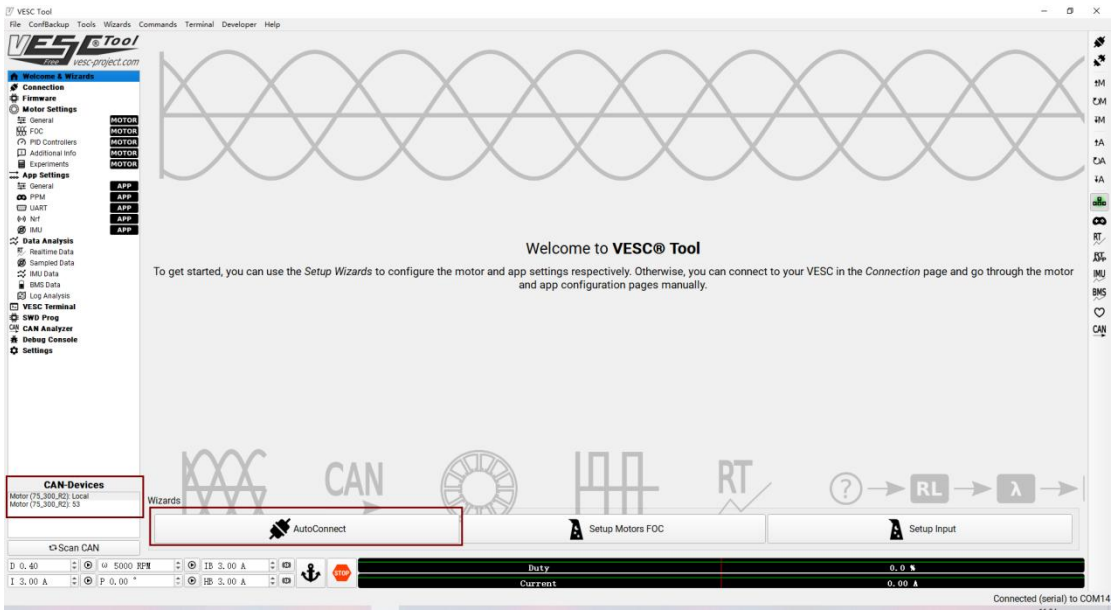
The hardware connection is shown in the figure below:



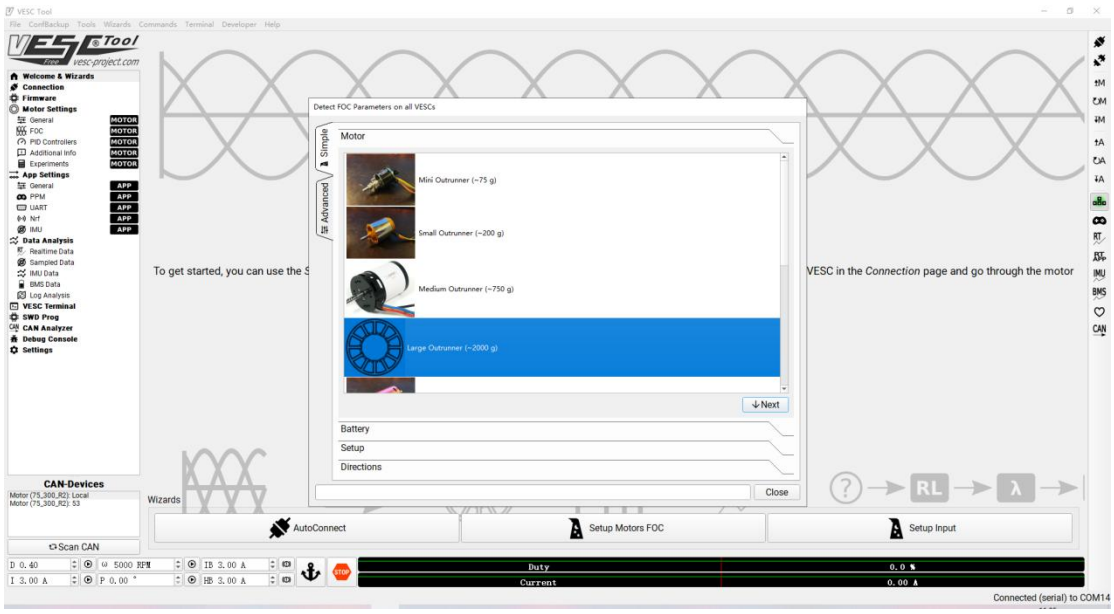
Note: Please do not make hardware connections with power on!

Part 2 Identify and calibrate the motor

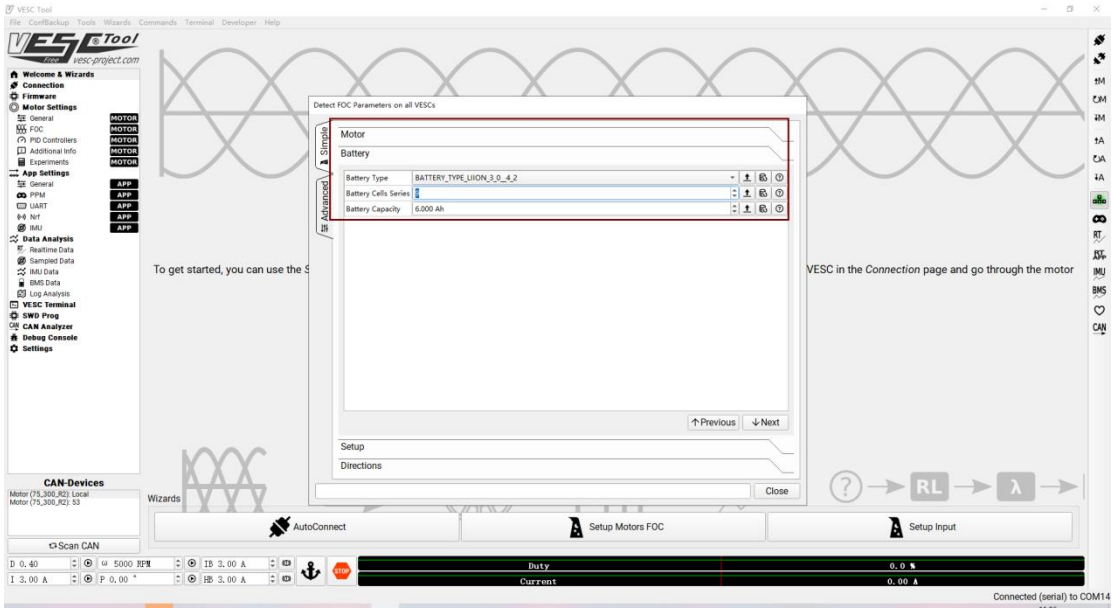
1. Click AutoConnect to connect to the VESC motherboard, and two motherboards are successfully identified, as shown in the figure below.



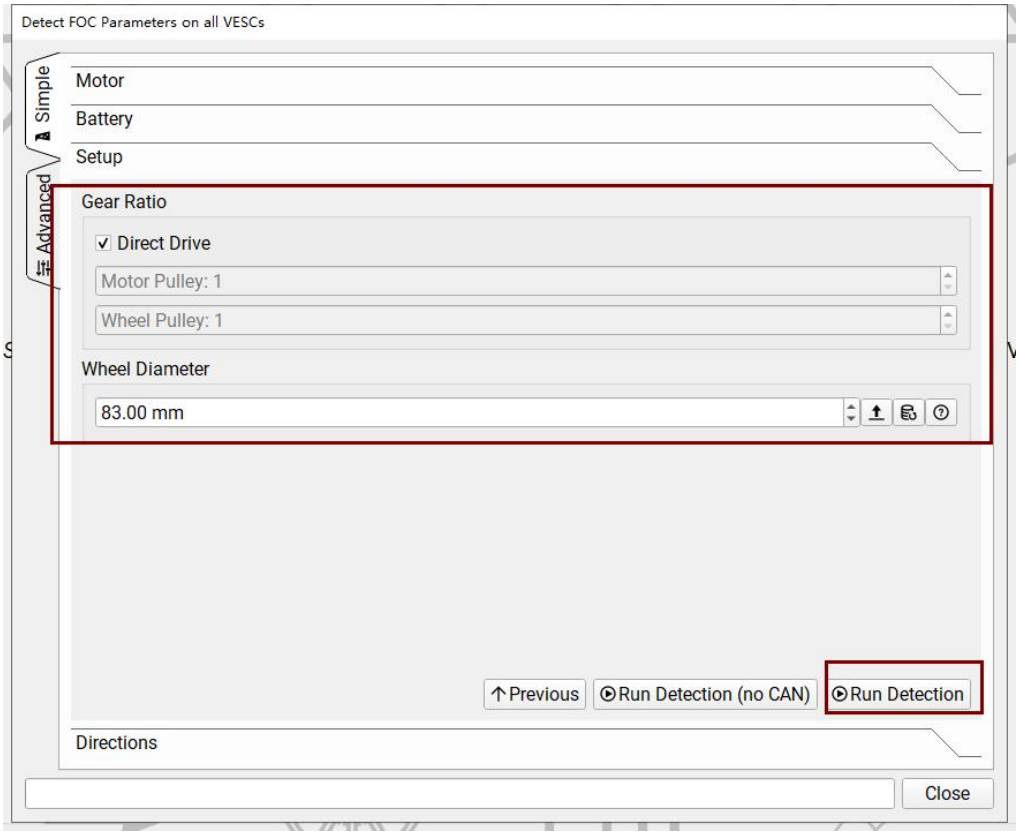
2. Click Setup Motors FOC, configure the motor FOC, and select according to the specifications of your own motor, as shown in the figure below.



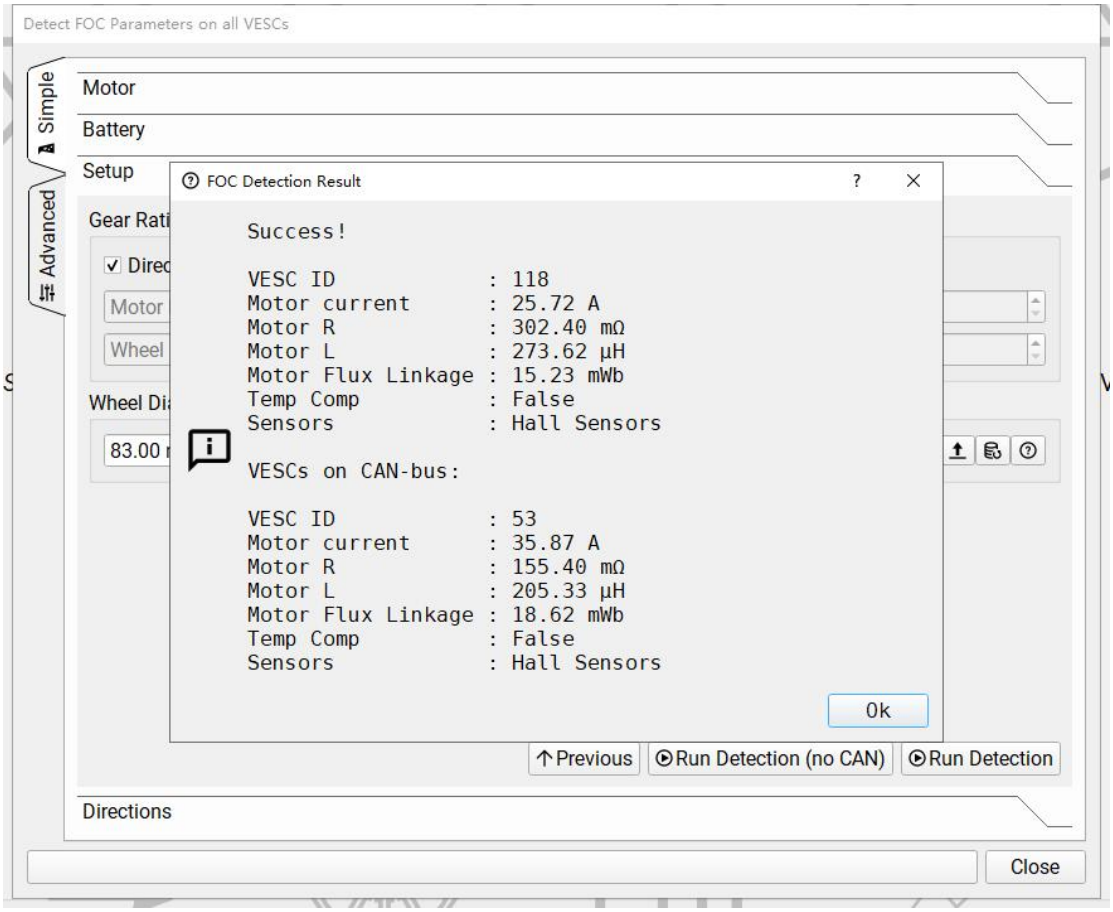
3. According to the battery parameters, select the battery type, number of battery cells, battery capacity and other parameters, and then click "↓Next", as shown in the figure below:



4. If you have not assembled gears and wheels, please check "Direct Drive"; if you have assembled, please configure according to the actual parameters, and then click "Run Detection", as shown in the figure below:
Note: "Run Detection (no CAN)" cannot be selected, and only one motor will be calibrated successfully.



5. The calibration process will take a little longer, please wait patiently; after the calibration is completed, the motor parameters and Hall sensor mode will be displayed, as shown in the figure below:



After the calibration is complete, configure the "Setup Input" to control the dual motors. For the steps to configure the "Setup Input", please refer to "Makerbase VESC Lesson 5 RC PPM Remote Control Test" and "Makerbase VESC Lesson 6 ADC Input Mode Test".

This is the end of the Makerbase MKSESC 75200 V2.0 dual-drive dual-motor test.
Stay tuned for future courses.