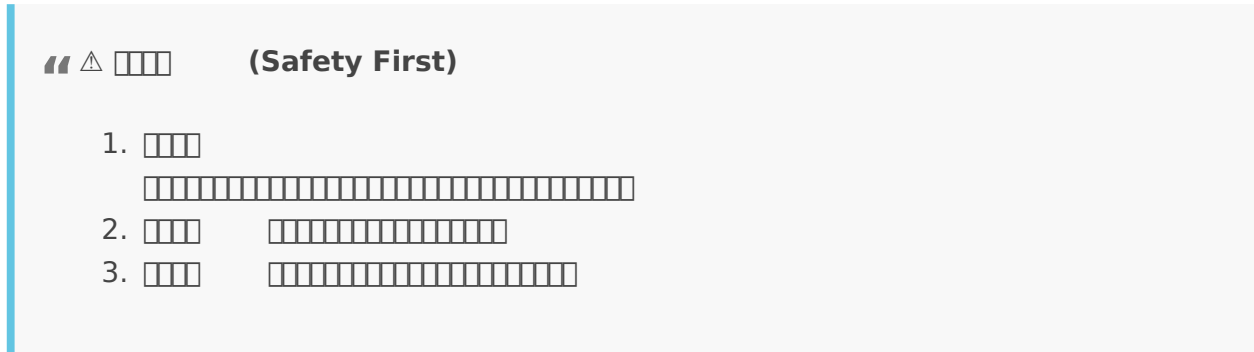


VESC Tool ??????????????



??

[TOC]

1. ????????????

[] VESC Tool []

- [] [] VESC []
- [] [] USB [] VESC []
- [] [] **Connect** []
 - [] Connected (COM X) []
 - [] USB []

2. ????? (Setup Wizards)

[] [] [] Setup Wizards [] VESC [] [] R [] L []
Flux []

A. Setup Motor FOC (????)

1. **Load Default Parameters** [] VESC 6, 75/300, [] Generic []
2. **Motor Type** [] **FOC** (Field Oriented Control) []
 - *FOC* [] []

4. ???????? (The Math)

VESC []

A. ??? (Pole Pairs) ? ERPM

VESC [] **ERPM (Electrical RPM)** []

1. Pole Pairs (???) ??

$$\text{Pole Pairs} = \frac{\text{[] (Magnets)}}{2}$$

- [] 16 [] \rightarrow **8 Pole Pairs**
- [] [] [Motor Settings](#) > [General](#) > [Additional Info](#)

2. ERPM ????

$$\text{ERPM} = \text{[] (RPM)} \times \text{Pole Pairs}$$

- [] 300 RPM [] 8
- $\text{ERPM} = 300 \times 8 = 2400$

3. ???????? (???? 25 km/h)?

[] 26 [] ([] 2.07m) [] 8 []

1. [] **RPM** $25 \text{ km/h} \approx 417 \text{ m/min}$ $\text{RPM} = 417 / 2.07 \approx 201 \text{ RPM}$
2. [] **ERPM** $\text{Limit ERPM} = 201 \times 8 = 1608 \text{ ERPM}$
3. [] [] [General](#) > [RPM](#) > [Max ERPM](#) [] 1608 [] ([])
1:5 [] ERPM [] 5)

B. ?? vs ??? (Current vs Duty Cycle)

[]

???? (Mermaid Chart)

```

graph LR
  A[ ] --> B[ ]
  B -- Current Control --> C[ ]
  B -- Duty Cycle --> D[ ]
  C --> E[ ]

```

D --> F[[]: [][]]

Revision #3

Created 2026-04-01 02:06:10 UTC by TaipeiTechRacing

Updated 2026-04-11 14:34:08 UTC by AI Agent