

Hydraulic Braking System

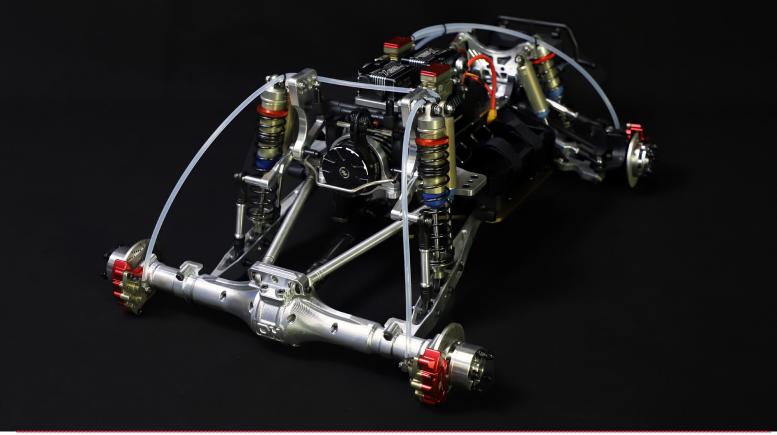
Four Wheel • Remote Control

Introduction

FID Racing's new four-wheel braking system is a real-scale thing. It is comprised of 2 × masters pumps, 4 × floating calipers and 2 × 120kg brushless remote controlled servos. Each caliper has 2 × pistons. 2 × switches allow for front wheel braking, rear wheel braking or four wheel braking. Braking force is adjustable. With this braking system, you'll enjoy ABS function like a real car. What's more, with this system, you can do stunts like launch control, tyre turnout and drifting.

This system changes motor braking to real mechanical & hydraulic braking, therefore achieving linear braking effect and braking gracefully, no abrupt stop, lowering the stresses on differentials, motor and ESC and reducing abrasion and increasing life.

This system is mainly made of alloy aluminum and CNC machined in high precision. Key components like master pumps and calipers are alloy 7075-T6 and hard-anodized to gold color.





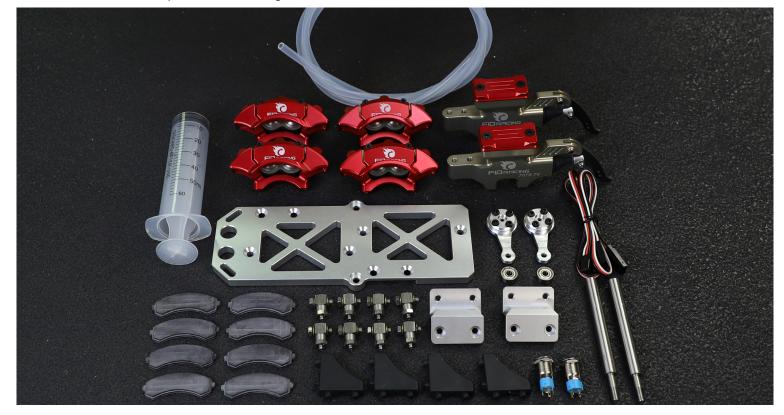
DIY VERSION

This version is intended for those modeller good at modification. To install it to your rc car, you need to diy some accessories and attachments to adapt it to your car.



PRO VERSION

This version is intended for those who bought our Voltz V2 (rolled out in 2022). They are fully compatible. But it doesn't include the servos. You'll have to purchase 2 × 120kg brushless servos (15T).





Max Pro Version

This versionn is fully compatible with our Voltz V2 (rolled out in 2022). Servos are included.



Details





Master pump is made of high strength alloy 7075-T6, CNC machined in high precision and hard-anodized. It is dual Y-ring piston design. Piston shaft is red POM material, with excellent strength and anti-friction property. Others include stainless steel tube connectors, HRC60° 65Mn spring brake pedal, piano-wire return spring.



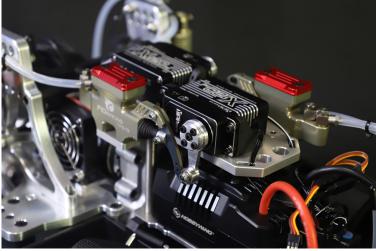


Caliper setup is floating structure and dual piston design. When braking, brake pad will be pushed out and the other side pad



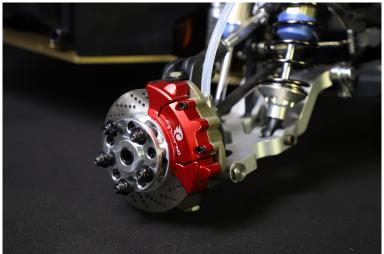
will press against the brake disk automatically due to counter-force. Piston is sealed by a Y-ring and a O-ring. Caliper is made of high strength alloy 7075-T6, CNC machined in high precision and hard-anodized to gold color.





It comes with 2 × 120kg brushless servos, remotely controlled. 2 × switches allow for servo on/off separately and independently. Through remote control's brake mixing function, it could switch front braking, rear braking or four-wheel braking, and therefore realise stunt maneuvers like tyre burnout, donut, launch control etc.





One of a kind braking system endows a different quality to your car.

Note: This system has to use DOT3 brake fluid. It is easily available from local market and prepared by dear users.

FAQ

1. How to drain the bubbles in the tube?

Reply: Start draining from any caliper. First fill the brake fluid to 2/3 space of the master pump, then loose the draining bolt on caliper, press the brake pedal repeatly and wait for bubbles to disappear, and do this on calipers one by one. Single tiny bubble would not affect braking effect.

2. Which brake fluid does it use?

Reply: Make sure to use DOT3 brake fluid. Other brake fluid would corrode seal rings over the time resulting brake failure.

3. Why are the right and left brake forces different, one tight and one loose?

Reply: For first use, make sure the clearance between brake pad and brake disk is within 0.05mm. Bigger or uneven clearance will cause this effect. You can grind the pad by fine sand paper, but after adjusting the pad thinkness, make sure to clear the bubbles again.

4. Why does master pump piston not return to position after long-time use?

Reply: Please replace new piston and seal rings, or a new master pump if it's very bad. And make sure there are no impurities in the brake fluid which will cause severe abrasion, therefore resulting failure.

5. There is leakage at the connector

Reply: Make sure to cut the tube smoothly and vertically, and connect the connector vertically. Oblique connection will result in leakage.