Fms Reflex V3

Fms RC Airplane Reflex V3 Flight Control System User Manual

Model: Reflex V3
Brand: Fms

Introduction

The Fms Reflex V3 Mini Gyro Flight Control System is an advanced stable flight controller designed for remote control aircraft. It utilizes a high-speed 32-bit ARM processor and incorporates solid-state 3-axis gyro and 3-axis accelerometer sensors to provide precise flight stabilization. This system is engineered to automatically recognize SBUS/PPM/PWM systems, ensuring compatibility with all radio systems featuring 4 channels or more. The Reflex V3 simplifies operation by being pre-programmed for specific aircraft, eliminating the need for complex additional programming. Users can easily connect their receiver to the gyro and set up the aircraft normally. A key enhancement in the V3 version is its Bluetooth connectivity, allowing users to connect to a mobile app for convenient parameter setting functions, even for non-FMS models.

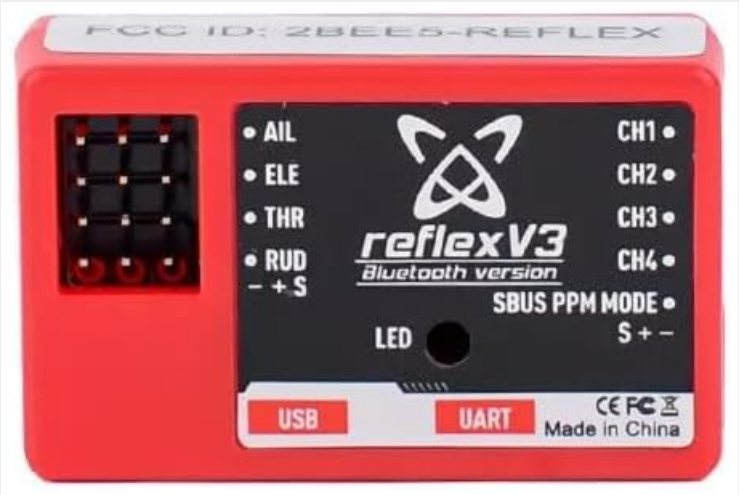


Image: The Fms Reflex V3 Mini Gyro Flight Control System unit.

What's in the Box

Upon opening the package, please verify that all components are present and in good condition:

- 1 x Reflex V3 Flight Controller Unit
- 1 x USB Data Cable

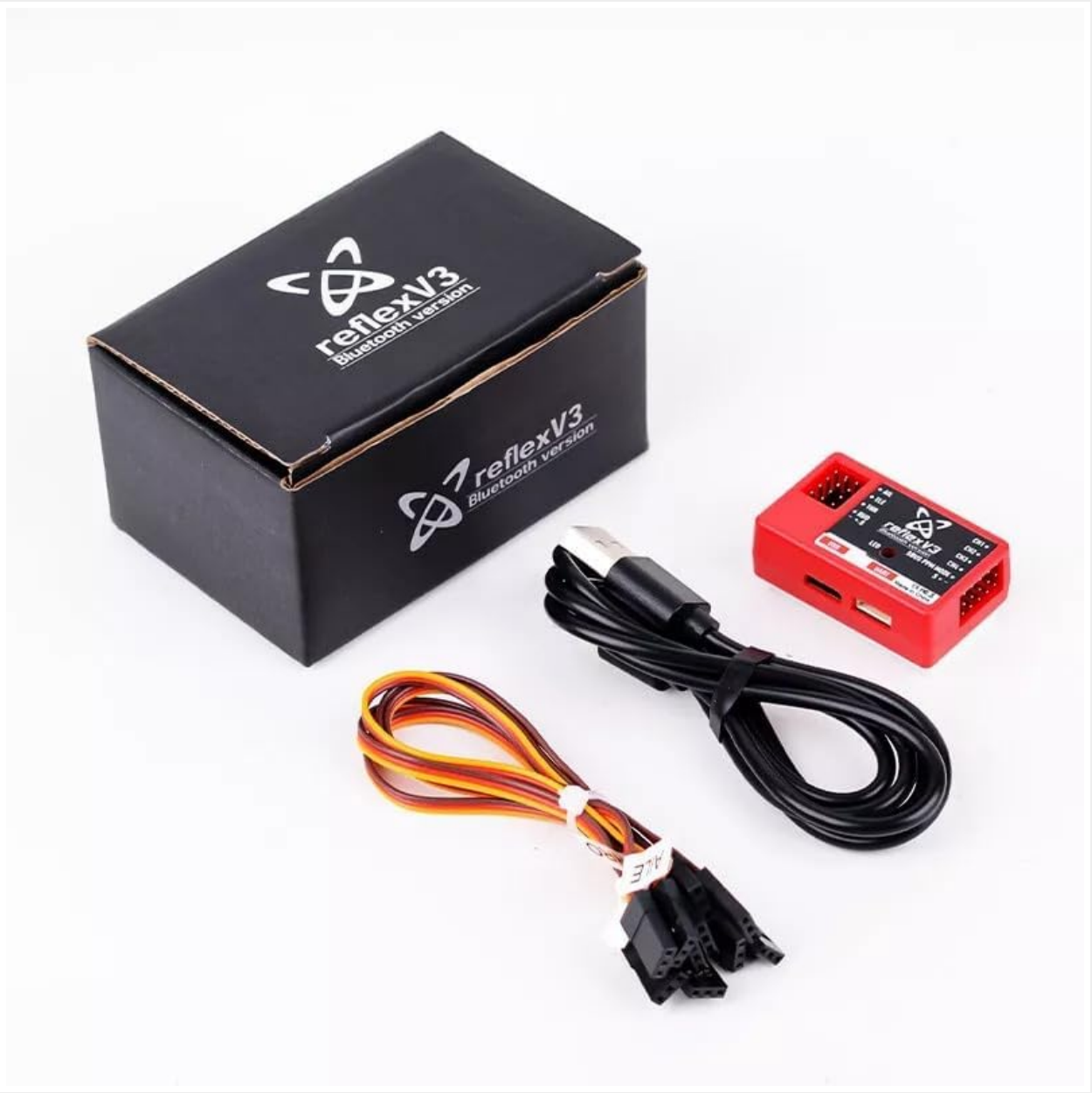


Image: Contents of the Fms Reflex V3 package, including the Reflex V3 unit, USB cable, and connection wires.

Specifications

Feature	Detail
Processor	High-speed 32-bit ARM processor
Sensors	Solid-state 3-axis gyro and 3-axis accelerometer
Compatibility	SBUS/PPM/PWM systems, all radio systems with 4 channels or above
Connectivity	Bluetooth for mobile app (iOS/Android), USB for PC software
Dimensions	3.58 x 3.5 x 1.57 inches (Package)
Item Weight	2.39 ounces
Manufacturer Recommended Age	14 years and up

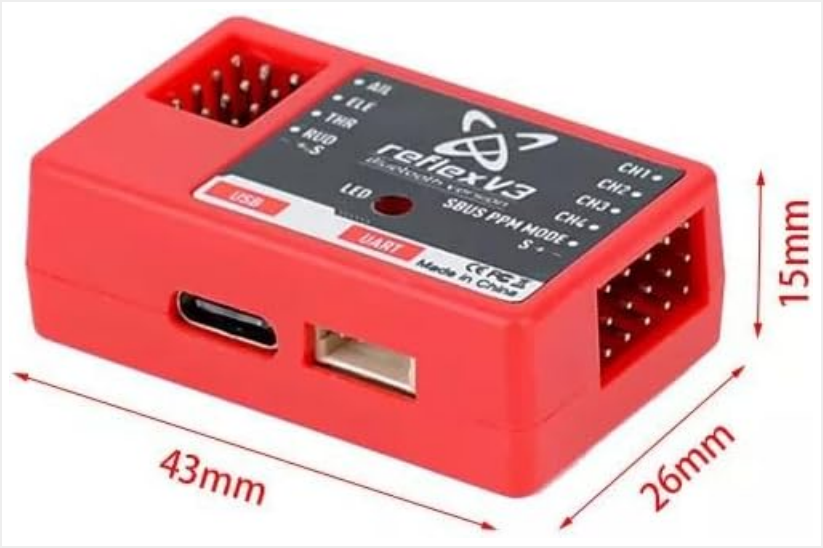


Image: Detailed dimensions of the Fms Reflex V3 unit.

Setup

Hardware Connection

Connecting the Reflex V3 to your RC aircraft's receiver is a straightforward process. The system is designed for easy integration. Ensure your aircraft's power is off before making any connections.

1. Identify the Aileron, Elevator, Throttle, and Rudder channels on your receiver.
2. Connect the corresponding servo leads from your aircraft's control surfaces (aileron, elevator, throttle, rudder) to the designated ports on the Reflex V3 unit (AIL, ELE, THR, RUD).
3. Connect the Reflex V3 to your receiver. The Reflex V3 automatically recognizes SBUS/PPM/PWM systems. If using a 4-channel transmitter, utilize the included jumper to select between flight modes by plugging it into the “gyro mode input” port.
4. Securely mount the Reflex V3 unit in your aircraft. Ensure it is firmly attached and oriented correctly as indicated in the software's installation instructions for your specific aircraft model.

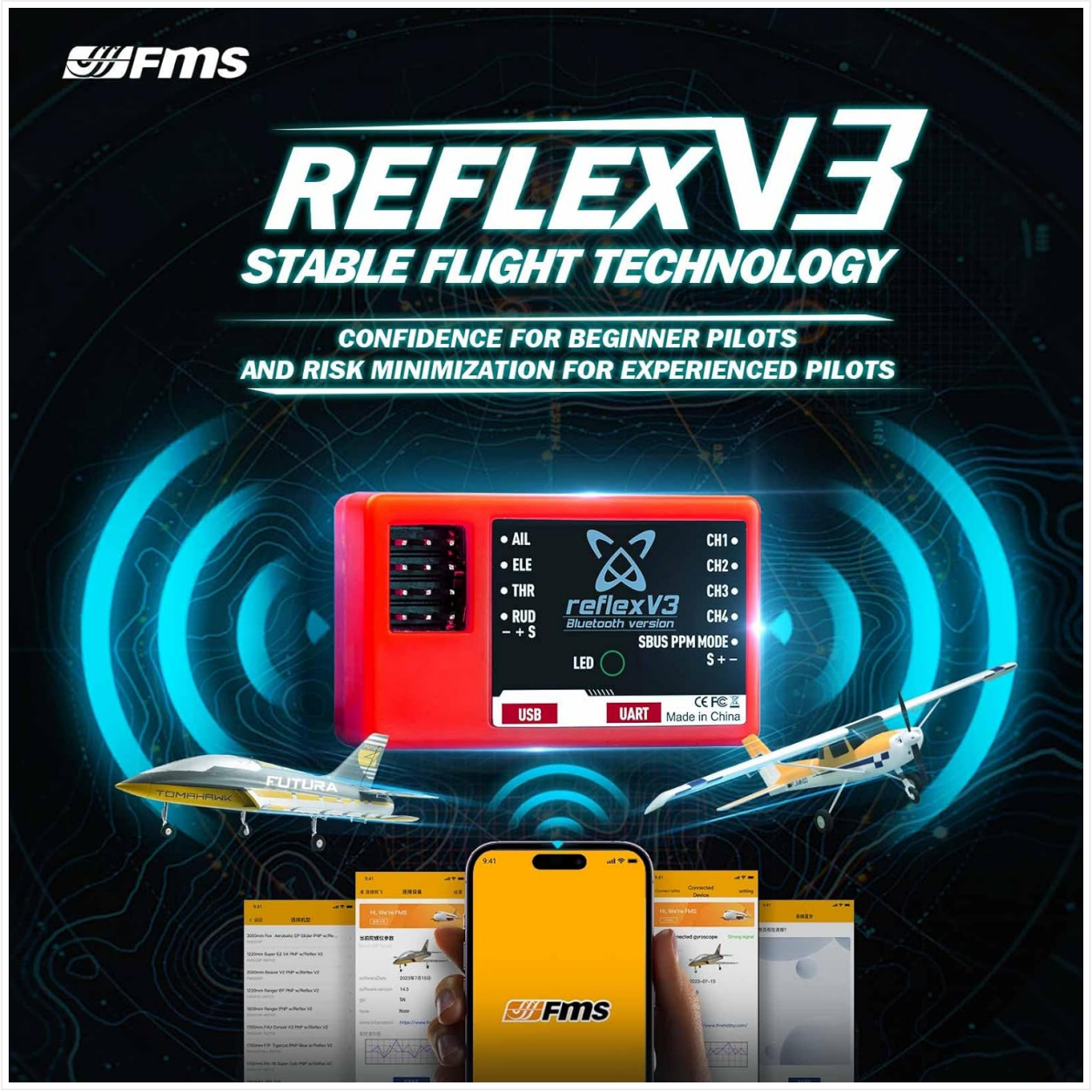


Image: Diagram showing the connection points for Aileron, Elevator, Throttle, and Rudder channels on the Reflex V3 unit.

Software Installation & Configuration

The Reflex V3 can be configured and updated via a mobile app (iOS/Android) or computer software. This allows for fine-tuning parameters and selecting specific aircraft models.

- **Mobile App:** The Reflex V3 version can be connected to a mobile app via Bluetooth after power-on. This unlocks parameter setting functions, which are available for non-FMS models as well.
- **Computer Software:** Synchronize required parameters through computer software. Connect the Reflex V3 to your computer using the provided USB data cable.

For a detailed guide on software installation and initial configuration, please watch the official video below:

Video: Official software installation guide for the Fms Reflex V3. This video demonstrates the steps to install and configure the necessary software for your flight controller.

After installation, set up the corresponding channels and directions on your remote controller. Parameter setting functions are primarily supported by the mobile app for user-friendly operation.

Operating Modes

The Fms Reflex V3 offers multiple flight modes to cater to different pilot skill levels and flight conditions:

Stabilized Mode

In Stabilized Mode, the Reflex V3 limits control surface travel, which results in tame flight characteristics ideal for beginner pilots. The aircraft automatically returns to level flight when no control input is given, significantly reducing the sensitivity of the aircraft and eliminating rolls and yaw caused by operational errors, thereby maximizing flight safety.

Video: Demonstration of the FMS Reflex V3 in Stabilized Mode, showcasing its ability to maintain stable flight and assist with takeoff.

Optimized Mode

Optimized Mode minimizes environmental effects on the airframe. In this mode, the pilot retains maximum control while the Reflex system neutralizes attitude changes caused by wind gusts. This provides a balance between stability and responsiveness, allowing for more dynamic flight while still benefiting from gyro assistance.

Video: Overview of Reflex V3 Stable Flight Technology, illustrating the benefits of Optimized Mode in various flight scenarios.

Manual Mode

In Manual Mode, pilots maintain complete control over maneuvering the aircraft for rolls, high-speed turns, and other aerobatic maneuvers. The Reflex V3 system provides no stabilization or angle limits in this mode, offering an unrestricted flight experience for experienced pilots.

Maintenance

To ensure the longevity and optimal performance of your Fms Reflex V3 Flight Control System, regular maintenance is recommended:

- **Keep Clean:** Periodically clean the exterior of the Reflex V3 unit with a soft, dry cloth. Avoid using harsh chemicals or solvents.
- **Check Connections:** Before each flight, inspect all wiring connections to ensure they are secure and free from damage. Loose connections can lead to erratic behavior or loss of control.
- **Environmental Protection:** Protect the unit from moisture, extreme temperatures, and direct sunlight. While designed for RC aircraft, excessive exposure to harsh elements can degrade performance.
- **Software Updates:** Regularly check for and install the latest software and firmware updates via the Fms mobile app or PC software. Updates often include performance improvements and bug fixes.
- **Storage:** When not in use, store the Reflex V3 in a dry, cool place, away from dust and static electricity.

Troubleshooting

If you encounter issues with your Fms Reflex V3 Flight Control System, consider the following common troubleshooting steps:

- **No Response/Incorrect Control:**

- Verify all connections between the Reflex V3, receiver, and servos are correct and secure.
- Ensure the Reflex V3 is powered on and receiving power from the receiver.
- Check the orientation of the Reflex V3 unit in the aircraft against the recommended installation diagram for your model. Incorrect orientation can lead to reversed or erratic control.

- **No Stabilization/Erratic Behavior:**
  - Confirm that the correct aircraft model profile is loaded onto the Reflex V3 via the mobile app or PC software.
  - Check the sensitivity settings in the app. Adjusting sensitivity can resolve over-correction or under-correction issues.
  - Ensure your transmitter's sub-trims and end-points are correctly set and not interfering with the gyro's operation.
- **Connection Issues (Bluetooth/USB):**
  - For Bluetooth, ensure the Reflex V3 is powered on and within range of your mobile device. Restart both devices if necessary.
  - For USB, ensure the USB data cable is properly connected to both the Reflex V3 and your computer. Try a different USB port or cable if connection fails.
- **Firmware Update Failure:**
  - Ensure a stable internet connection during updates.
  - Do not disconnect the USB cable or power off the unit during an update.
  - If an update fails, try again, ensuring all other applications are closed on your computer.

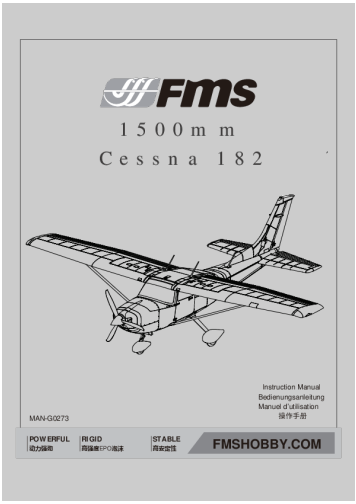
If problems persist after attempting these steps, please refer to the official Fms support resources or contact customer service.

Warranty and Support

Specific warranty details for the Fms Reflex V3 Mini Gyro Flight Control System are typically provided at the point of purchase or within the product packaging. Please retain your proof of purchase for warranty claims.

For technical support, further assistance, or to access the latest software and firmware, please visit the official Fms website or contact their customer service department. Online resources often include FAQs, detailed guides, and community forums that can provide valuable information and solutions.

You can visit the Fms Store for more information:Fms Store on Amazon



[pdf] User Manual Instructions

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1500mm Cessna 182 MAN-G0273 POWERFUL RIGID EPO STABLE Instruction Manual Bedienungsanleitung ... ccurately executing input commands. Most pleasingly, the 1500mm Cessna 182 can be equipped with the **Reflex V3** sold separately , which can be connected via Bluetooth and unlocks custom tuning function...

lang:en score:24 filesize: 10.68 M page_count: 21 document date: 2024-04-18

FMS Reflex V3 Bluetooth Version Flight Controller Manual

Comprehensive guide to the FMS Reflex V3 Bluetooth Version flight controller, covering system overview, functions, operation instructions, aircraft model updates, and FCC information.

lang:en score:21 filesize: 349.99 K page_count: 16 document date: 2024-01-31

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MAN G0279 V3 110x170mm Stabilized mode Designed for beginners Reflex will rapidly level the aircraft from any attitude when this is activated combines accelerometer and gyro data to determine how control sticks are released giving pilots absolute peace of mind OFF Turns off all functionality FMSREF002 255 rc4max upload |||

reflexV3 Bluetooth version scan the QR code to download the app APP Reflex system overview 1.Uti ... lly recognizes SBUS/PPM/PWM systems, compatible with all radio systems with 4 channels or above. 4. **Reflex V3** version can be connected to a mobile app via Bluetooth after power-on, unlocking parameter...

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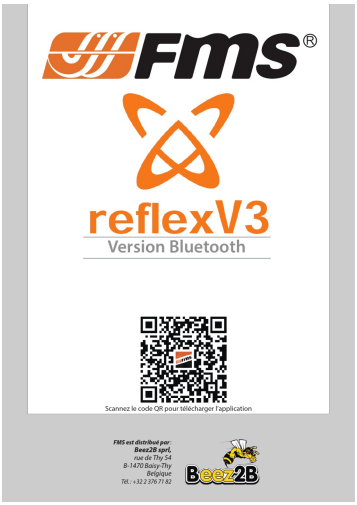

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Version Bluetooth Scannez le code QR pour tlcharger l application FMS est distribu par: Beez2B sprl, rue de Thy 54 B-1470 Baisy-Thy Belgique Tl.: 32 2 376 71 82 Beez2B - Manuel en Franais du **Reflex V3** de FMS Prsentation du systme Reflex 1. Utilise un processeur ARM intgr 32 bits haute vitesse....

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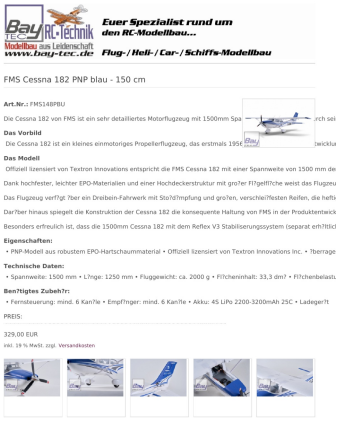

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FMS Cessna 182 PNP blau 150 cm FMS148PBU 27 апр 2025 г — Die von ist ein sehr detailliertes Motorflugzeug mit 1500mm Spannweite das nicht nur durch seine vorbildg Das Vorbild Bay Tec Modelltechnik bay tec de shop20 print product info products id 19778 |||

FMS Cessna 182 PNP blau - 150 cm Art.Nr.: FMS148PBU Die Cessna 182 von FMS ist ein sehr detaillierte ... Haltung von FMS in der Produktentwick Besonders erfreulich ist, dass die 1500mm Cessna 182 mit dem **Reflex V3** Stabiliserungssystem separat erh ltlich Eigenschaften: PNP-Modell aus robustem EPO-Harts...

lang:de score:12 filesize: 208.77 K page_count: 1 document date: 2025-05-08