FMS FMS114PF-REFV2

FMS 1500MM MAULE PNP w/FLOAT & REFLEX V2 User Manual

Model: FMS114PF-REFV2 | Brand: FMS

1. Product Overview

The FMS 1500mm Maule is a remote-controlled aircraft designed to replicate the low-speed handling and short take-off and landing (STOL) features of the full-scale Maule aircraft. Constructed from lightweight and durable EPO foam, and equipped with functional flaps, this model is capable of short take-offs, typically within three meters.

Figure 1: The FMS 1500mm Maule aircraft in flight, showcasing its design and maneuverability.

2. Important Safety Information

Read all safety warnings and instructions carefully before operation to prevent injury or damage.

- An adult must be present during the operation of the vehicle.
- The product is not waterproof, unless the float set is installed for water operations. Avoid exposing electronic components to moisture.
- Turn the vehicle and transmitter OFF when not in use.
- The battery may become damaged if the vehicle is left on while not in use.
- This vehicle uses a rechargeable battery. Incorrect handling of the battery may cause the battery to puncture, leak battery acid, and may result in a potential fire.
- Please dispose of batteries in accordance with laws and regulations in your area.
- Connect the charger per instructions. Incorrect charger connection may result in a short-circuit or other

damage.

3. Package Contents

The FMS 1500mm Maule PNP (Plug-N-Play) package includes the following components:

- FMS 1500mm Maule Aircraft (main airframe)
- Optional Float Set with Steerable Water Rudder
- Pre-installed Electronic Speed Controller (ESC)
- Pre-installed Motor
- Pre-installed Servos
- Product Manual

Items Required for Operation (Not Included):

- Transmitter (Remote Control)
- Flight Battery
- Battery Charger

4. Assembly and Initial Setup

The FMS 1500mm Maule is designed for glue-free assembly, making the setup process straightforward. Follow these general steps for initial assembly:

4.1. Unpacking and Inspection

- Carefully remove all components from the packaging.
- Inspect all parts for any signs of damage during shipping. Contact your retailer if any parts are damaged or missing.

4.2. Main Airframe Assembly

1. Attach the main wings to the fuselage. Ensure all electrical connections for the aileron and flap servos are securely plugged in before fully seating the wings.
2. Install the horizontal and vertical stabilizers onto the tail section of the fuselage. Secure them according to the provided diagrams.
3. Connect the pushrods from the elevator and rudder servos to their respective control horns on the tail surfaces.

Figure 2: Detail of the wing and functional flaps, crucial for STOL performance.

4.3. Landing Gear Installation (Choose One)

The FMS Maule comes with two options for landing gear: traditional wheeled landing gear for land operations or floats for water operations.

- **For Land Operations:** Attach the main wheeled landing gear to the designated slots on the fuselage. Install the tail wheel assembly.
- **For Water Operations:** Attach the float set to the fuselage. Ensure the steerable water rudder linkage is connected to the appropriate servo for directional control on water.

Figure 3: The FMS Maule can be equipped with either wheeled landing gear or floats, offering versatility for different terrains.

4.4. Electronics Connection and Binding

1. Connect your fully charged flight battery to the pre-installed ESC. Ensure correct polarity.
2. Turn on your transmitter. Ensure the throttle stick is at its lowest position.
3. Power on the aircraft. Follow your transmitter and receiver's specific instructions to bind them. This establishes communication between your remote control and the aircraft.
4. Once bound, perform a control surface check. Move the sticks on your transmitter and verify that all control surfaces (ailerons, elevator, rudder, flaps) move freely and in the correct direction. Adjust servo reversing on your transmitter if necessary.

Figure 4: The pre-installed brushless power system delivers ample performance for flight.

5. Operating Instructions

5.1. Pre-Flight Checks

- Ensure the flight battery is fully charged and securely installed in the aircraft.
- Verify all control surfaces (ailerons, elevator, rudder, flaps) move freely and correctly in response to transmitter inputs.
- Check the propeller for any damage, cracks, or looseness. Replace if necessary.
- Confirm the transmitter battery is charged.
- Ensure your flying area is clear of obstacles, people, and animals.

5.2. Take-off (Land Operations)

Position the aircraft on a smooth surface, facing into the wind. Gradually increase throttle. As the aircraft gains

speed, apply slight up-elevator to lift off. The Maule's STOL capabilities allow for very short take-off distances.

5.3. Flight

The FMS Maule is designed for stable and predictable flight characteristics. Utilize the functional flaps for slower flight speeds, enhanced lift, and improved short-field performance. Practice gentle turns and altitude changes to familiarize yourself with the aircraft's handling.

5.4. Landing (Land Operations)

Approach the landing area into the wind. Deploy flaps as needed to reduce speed and increase drag. Gradually reduce throttle and gently flare (pull up slightly on the elevator) just before touchdown to achieve a smooth landing.

5.5. Water Operations (with Floats)

When equipped with the optional float set, the Maule can operate from water surfaces. The steerable water rudder provides directional control while on the water.

5.5.1. Water Take-off

Position the aircraft on the water, facing into any prevailing wind. Gradually increase throttle. The aircraft will gain speed across the water and lift off smoothly.

5.5.2. Water Landing

Approach the water surface smoothly, maintaining a slight nose-up attitude. Reduce throttle and touch down gently on the floats. Use the steerable water rudder for taxiing to shore.

Figure 5: The FMS Maule with floats demonstrating a water take-off, highlighting its amphibious capabilities.

6. Maintenance and Care

- After each flight, inspect the airframe for any damage to the EPO foam, especially after hard landings. Minor dents can often be repaired with hot water or foam-safe glue.
- Check all control linkages and hinges for looseness or wear. Ensure smooth movement of all control surfaces.
- Ensure the propeller is free from nicks, cracks, or bends. A damaged propeller can cause vibrations and reduce performance. Replace if damaged.
- Keep the motor and ESC free from dirt, dust, and debris to ensure proper cooling and operation.
- Store the aircraft in a cool, dry place away from direct sunlight and extreme temperatures.
- Always disconnect and remove the flight battery from the aircraft when not in use to prevent accidental activation or battery discharge.
- Regularly check the condition of your flight battery and charger. Follow battery manufacturer guidelines

for charging and storage.

7. Troubleshooting Guide

Problem	Possible Cause	Solution
Aircraft does not respond to transmitter	Flight battery not connected or discharged Transmitter not bound to receiver Transmitter is off or low battery	Connect/charge flight battery Perform binding procedure Turn on transmitter, check/replace transmitter batteries
Motor not spinning	ESC not armed (throttle not at zero) Motor or ESC connection loose Damaged motor or ESC	Ensure throttle stick is at lowest position, then advance slightly Check all motor and ESC connections Inspect for physical damage; replace if necessary
Control surfaces not moving correctly or at all	Servo connection loose or disconnected Damaged servo Incorrect transmitter settings (e.g., servo reverse)	Check all servo connections to receiver Replace faulty servo Verify and adjust servo reversing and trim settings on transmitter
Poor flight performance or unstable flight	Damaged propeller Incorrect Center of Gravity (CG) Damaged airframe or control surfaces	Replace propeller Adjust flight battery position to achieve correct CG Inspect and repair any damage to foam or control surfaces
Aircraft drifts during flight	Trim settings incorrect on transmitter Wind conditions	Adjust trim buttons on your transmitter to correct drift Fly in calmer conditions or compensate with control inputs

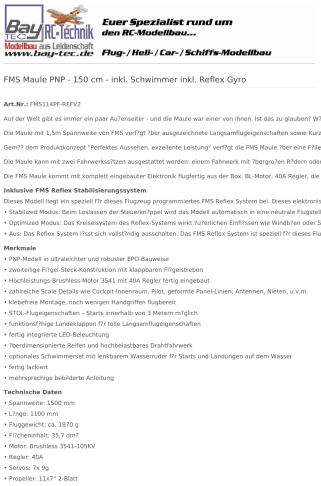
8. Product Specifications

Feature	Detail
Model Number	FMS114PF-REFV2
Product Dimensions	110 x 150 x 50 cm; 8 kg

Feature	Detail
Manufacturer Recommended Age	14 years and up
Number of Game Players	1
Number of Pieces	1
Assembly Required	Yes
Batteries Required?	Yes
Batteries Included?	No
Material Type(s)	Foam, Plastic, Metal, Rubber
Remote Control Included?	Yes
Remote Control Type	2.4ghz
Colour	White/Blue
ASIN	B0BLP54H6V
Date First Available	16 Feb. 2023

9. Warranty and Customer Support

For warranty information, technical assistance, or to inquire about replacement parts, please refer to the official FMS website or contact your local distributor. It is recommended to keep your proof of purchase for any warranty claims.
Please note that specific warranty terms and conditions may vary by region and retailer. Always consult the official FMS resources for the most accurate and up-to-date support information.



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FMS Maule PNP - 150 cm - inkl. Schwimmer inkl. Reflex Gyro

Art.Nr.: FMS114PF-REFV2

Auf der Welt gibt es immer ein paar Au?enseiter - und die Maule war einer von ihnen. Ist das zu glauben? W?hrend

Die Maule mit 1,5m Spannweite von FMS verf?gt ?ber ausgezeichnete Langsamflugeigenschaften sowie Kurzstart-

Gem?? dem Produktkonzept "Perfektes Aussehen, exzellente Leistung" verf?gt die FMS Maule ?ber eine F?lle von

Die Maule kann mit zwei Fahrwerks?tzen ausgestattet werden: einem Fahrwerk mit ?bergro?en R?dern oder mit

Die FMS Maule kommt mit komplett eingebauter Elektronik flugfertig aus der Box. BL-Motor, 40A Regler, die Servo

Inklusive FMS Reflex Stabilisierungssystem

Dieses Modell liegt ein speziell f?r dieses Flugzeug programmiertes FMS Reflex System bei. Dieses elektronische S

- Stabilized Modus: Beim Loslassen der Steuerkn?ppel wird das Modell automatisch in eine neutrale Flugstellung
- Optimized Modus: Das Kreiselsystem des Reflex-Systems wirkt ?u?erlichen Einfl?ssen wie Windb?en oder Seiten
- Aus: Das Reflex System l?sst sich vollst?ndig ausschalten. Das FMS Reflex System ist speziell f?r dieses Flugmo

Merkmale

- PNP-Modell in ultraleichter und robuster EPO-Bauweise
- zweiteilige Fl?gel-Stock-Konstruktion mit klappbaren Fl?gelstreben
- Hochleistungs-Brushless-Motor 3541 mit 40A Regler fertig eingebaut
- zahlreiche Scale Details wie Cockpit-Innenraum, Pilot, geformte Panel-Linien, Antennen, Nieten, u.v.m.
- klebefreie Montage, nach wenigen Handgriffen flugbereit
- STOL-Flugeigenschaften – Starts innerhalb von 3 Metern m?glich
- funktionsf?hige Landeklappen f?r tolle Langsamflugeigenschaften
- fertig integrierte LED-Beleuchtung
- ?berdimensionierte Reifen und hochbelastbares Drahtfahrwerk
- optionales Schwimmerset mit lenkbarem Wasserruder f?r Starts und Landungen auf dem Wasser
- fertig lackiert
- mehrsprachige bebilderte Anleitung

Technische Daten

- Spannweite: 1500 mm
- L?nge: 1100 mm
- Fluggewicht: ca. 1870 g
- Fl?cheninhalt: 35,7 dm?
- Motor: Brushless 3541-105KV
- Regler: 40A
- Servos: 7x 9g
- Propeller: 11x7" 2-Blatt

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