SYMA X12 Mini

Syma X12 Mini Nano 6-Axis Gyro 4 Channel RC Quadcopter User Manual

Model: X12 Mini (X12S-R)

Introduction

This manual provides comprehensive instructions for the safe and effective operation, setup, maintenance, and troubleshooting of your Syma X12 Mini Nano 6-Axis Gyro 4 Channel RC Quadcopter. Please read this manual thoroughly before first use to ensure optimal performance and to prevent damage.

Safety Precautions

- Always operate the quadcopter in open, clear areas, away from people, animals, and obstacles.
- Do not fly near high-voltage lines, communication base stations, or other electromagnetic interference sources.
- Keep fingers, hair, and loose clothing away from rotating propellers.
- Ensure the battery is fully charged before each flight.
- Do not attempt to modify or disassemble the quadcopter or its components.
- Recommended age for operation is 14 years and up.

Package Contents

Verify that all components are present in the package:

- Syma X12 Mini Nano Quadcopter (Red)
- Remote Controller
- USB Charging Cable
- Spare Propellers (4 PCS)
- Screwdriver



Image: Contents of the Syma X12 Mini package, showing the quadcopter, remote controller, USB charging cable, spare propellers, and a small screwdriver.

Quadcopter Overview



Image: Top view of the Syma X12 Mini Nano Quadcopter, highlighting its compact size and propeller configuration.



Image: The Syma X12 Mini Nano Quadcopter placed next to a US quarter coin, demonstrating its very small size.



Image: The Syma X12 Mini Nano Quadcopter resting in the palm of a hand, illustrating its extremely small and portable form factor.

Remote Controller Overview



Image: A detailed diagram of the Syma X12 Mini remote controller, indicating the functions of the left joystick (throttle), right joystick (direction), H/L speed switch, eversion switch, power indicator, fine-tuning buttons, and mode switch.

Controller Functions:

- **Left Joystick (Throttle Lever):** Controls altitude (up/down) and yaw (left/right rotation).
- **Right Joystick (Direction Lever):** Controls forward/backward and left/right sideward flight.
- **H/L Speed Switch:** Toggles between high and low speed modes.
- **Eversion Switch:** Initiates 360-degree flips/eversions.
- **Fine-Tune Buttons:** Adjusts trim to correct unwanted drift.
- **Mode Switch:** (If applicable) Changes control modes.
- **Power Indicator:** Shows the controller's power status.

Setup

1. Charging the Quadcopter Battery

The Syma X12 Mini uses a 3.7V 100mAH Li-poly battery. Charging time is approximately 40 minutes.

1. Connect the USB charging cable to the quadcopter's charging port.
2. Plug the USB end of the cable into a USB power source (e.g., computer USB port, USB wall adapter).
3. The indicator light on the USB cable will illuminate during charging and turn off when charging is complete.

2. Installing Controller Batteries

The remote controller requires 4 "AA" 1.5V batteries (not included).

1. Open the battery compartment on the back of the remote controller.
2. Insert 4 "AA" batteries, ensuring correct polarity (+/-).
3. Close the battery compartment securely.

Operating Instructions

1. Pairing the Quadcopter and Controller

1. Place the quadcopter on a flat, level surface.
2. Turn on the quadcopter's power switch. The indicator lights on the quadcopter will flash.
3. Turn on the remote controller. The power indicator light on the controller will flash.
4. Push the left joystick (throttle) all the way up, then pull it all the way down.
5. The indicator lights on both the quadcopter and controller will become solid, indicating successful pairing.

2. Take-off and Landing

- **Take-off:** Slowly push the left joystick (throttle) upwards. The propellers will begin to spin, and the quadcopter will ascend.
- **Landing:** Slowly pull the left joystick (throttle) downwards. The quadcopter will descend. Once it lands, pull the joystick all the way down to stop the motors.

3. Flight Controls

- **Ascend/Descend:** Push the left joystick up to ascend, pull down to descend.
- **Forward/Backward:** Push the right joystick up to fly forward, pull down to fly backward.
- **Turn Left/Right (Yaw):** Push the left joystick left to rotate counter-clockwise, push right to rotate clockwise.
- **Sideward Flight (Left/Right):** Push the right joystick left to fly left sideward, push right to fly right sideward.
- **360° Eversion (Flips):** Press the Eversion Switch button, then push the right joystick in any direction to perform a flip. Ensure sufficient altitude before attempting.
- **Speed Mode:** Press the H/L Speed Switch button to toggle between low speed (for beginners) and high speed (for experienced pilots).

4. Trim Adjustment

If the quadcopter drifts in any direction without input, use the fine-tune buttons to correct it. For example, if it drifts forward, press the backward fine-tune button until it hovers stably.

Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the quadcopter. Do not use water or solvents.
- **Propeller Replacement:** If propellers are damaged, use the included screwdriver to remove the old ones and install new ones. Ensure correct propeller (A or B) is installed on the correct motor.
- **Battery Care:** Do not overcharge or over-discharge the battery. Store the battery in a cool, dry place when not in use.
- **Storage:** When storing for extended periods, remove batteries from the remote controller.

Troubleshooting

Problem	Possible Cause	Solution
Quadcopter does not respond to controller.	Not paired; Low battery in quadcopter or controller.	Re-pair the quadcopter and controller; Charge quadcopter battery; Replace controller batteries.
Quadcopter drifts during flight.	Needs trim adjustment; Not placed on a level surface during pairing.	Use fine-tune buttons to adjust trim; Re-pair on a flat surface.
Quadcopter cannot take off or flies weakly.	Low quadcopter battery; Damaged propellers.	Charge quadcopter battery; Replace damaged propellers.
Lights flashing on quadcopter during flight.	Low voltage warning.	Land the quadcopter immediately and charge the battery.

Specifications

Feature	Detail
Brand	SYMA
Model Name	X12 Mini

Feature	Detail
Item Model Number	X12S-R
Dimensions (L x W x H)	3.03" x 3.03" x 1.06"
Weight	0.67 Pounds (approx. 10.7 ounces)
Battery	3.7V 100mAH Li-poly
Charging Time	Approximately 40 minutes
Flying Time	Approximately 4 minutes
Flying Distance (Range)	Approximately 20 meters
Control Channels	4 Channel
Gyro	6-Axis Gyro
Remote Control Technology	2.4GHz
Recommended Age	14 years and up

Warranty and Support

For warranty information and technical support, please refer to the official SYMA website or contact your retailer. Keep your purchase receipt as proof of purchase.
Official SYMA Store: SYMA Amazon Store
User Manual (PDF): Download PDF

© 2024 SYMA. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question