Flysky FS-R9B

Flysky FS-R9B 2.4G 8-Channel Receiver Instruction Manual

For FS-TH9X Transmitters in RC Planes and Helicopters

1. INTRODUCTION AND OVERVIEW

This manual provides detailed instructions for the proper setup, operation, and maintenance of your Flysky FS-R9B 2.4G 8-channel receiver. The FS-R9B receiver is designed for use with Flysky FS-TH9X 9-channel transmitters and is suitable for various RC models, including gliders, helicopters, and airplanes. Please read this manual thoroughly before using the product to ensure safe and efficient operation.

Image 1.1: Front view of the Flysky FS-R9B 8-channel receiver, showing the model number, CE certification, and channel labels.

2. FEATURES

- **8 Channels:** Supports up to 8 independent control channels.
- **2.4G AFHDS System:** Utilizes Flysky's Automatic Frequency Hopping Digital System for reliable communication.
- **Wide Compatibility:** Designed for RC gliders, helicopters, and airplanes.
- **High Resolution:** 1024-step resolution for precise control.
- **Robust RF Range:** Operates within the 2.40-2.48GHz frequency band.
- **Compact and Lightweight:** Small form factor (42.7 x 27 x 15mm) and light weight (11.3g) for easy integration.
- **Wide Input Voltage:** Supports 4.5-6.5V DC input power.
- **Certified:** CE and FCC certified for quality and safety.

3. SPECIFICATIONS

Specification	Value
Channels	8 Channels
Model Type	Glider, Helicopter, Airplane
RF Range	2.40-2.48GHz
Bandwidth	500Hz
Band	160
Receiving Sensitivity	-105dBm
2.4G System	AFHDS (Automatic Frequency Hopping Digital System)
Code Type	GFSK
Resolution	1024
Input Power	4.5-6.5V DC
Antenna Length	26mm
Weight	11.3g
Dimensions (L x W x H)	42.7 x 27 x 15mm
Color	Grey transparent
Certificates	CE, FCC
Item Model Number	Fs-r8b (Note: Product title indicates FS-R9B, but item model number is Fs-r8b. Please verify with product packaging.)

4. SETUP AND BINDING

The binding process establishes a secure communication link between your Flysky FS-TH9X transmitter and

the FS-R9B receiver. This procedure must be performed correctly for the system to operate.

Image 4.1: Close-up view of the Flysky FS-R9B receiver's channel ports (CH1-CH8) and the BIND/BAT port.

Image 4.2: The bind plug, used to initiate the binding process on the receiver.

Binding Procedure:

1. **Prepare Transmitter:** Ensure your Flysky FS-TH9X transmitter is powered off.

2. **Connect Bind Plug:** Insert the bind plug (as shown in Image 4.2) into the 'BIND/BAT' port on the FS-R9B receiver (refer to Image 4.1).

3. **Power Receiver:** Connect a power source (4.5-6.5V DC) to any other channel port on the receiver. The receiver's LED indicator should start flashing rapidly, indicating it is in binding mode.

4. **Activate Transmitter Binding:** While holding the 'BIND' button on your FS-TH9X transmitter, power on the transmitter. Continue holding the 'BIND' button until the receiver's LED changes its behavior (e.g., stops flashing rapidly and becomes solid or flashes slowly).

5. **Verify Binding:** Once the receiver's LED indicates successful binding (usually a solid light), release the 'BIND' button on the transmitter.

6. **Remove Bind Plug:** Power off the receiver, then remove the bind plug from the 'BIND/BAT' port.

7. **Test System:** Power on the transmitter first, then the receiver. The receiver's LED should illuminate solidly, indicating a successful connection. Test all control surfaces and functions to ensure proper operation.

If the binding process fails, repeat the steps carefully. Ensure both the transmitter and receiver are within close proximity during binding.

Image 4.3: The FS-R9B receiver with its antenna extended and a bind plug inserted into the BIND/BAT port, ready for the binding process.

5. OPERATING INSTRUCTIONS

After successful binding, connect your servos, Electronic Speed Controllers (ESCs), and other components to the appropriate channels on the FS-R9B receiver.
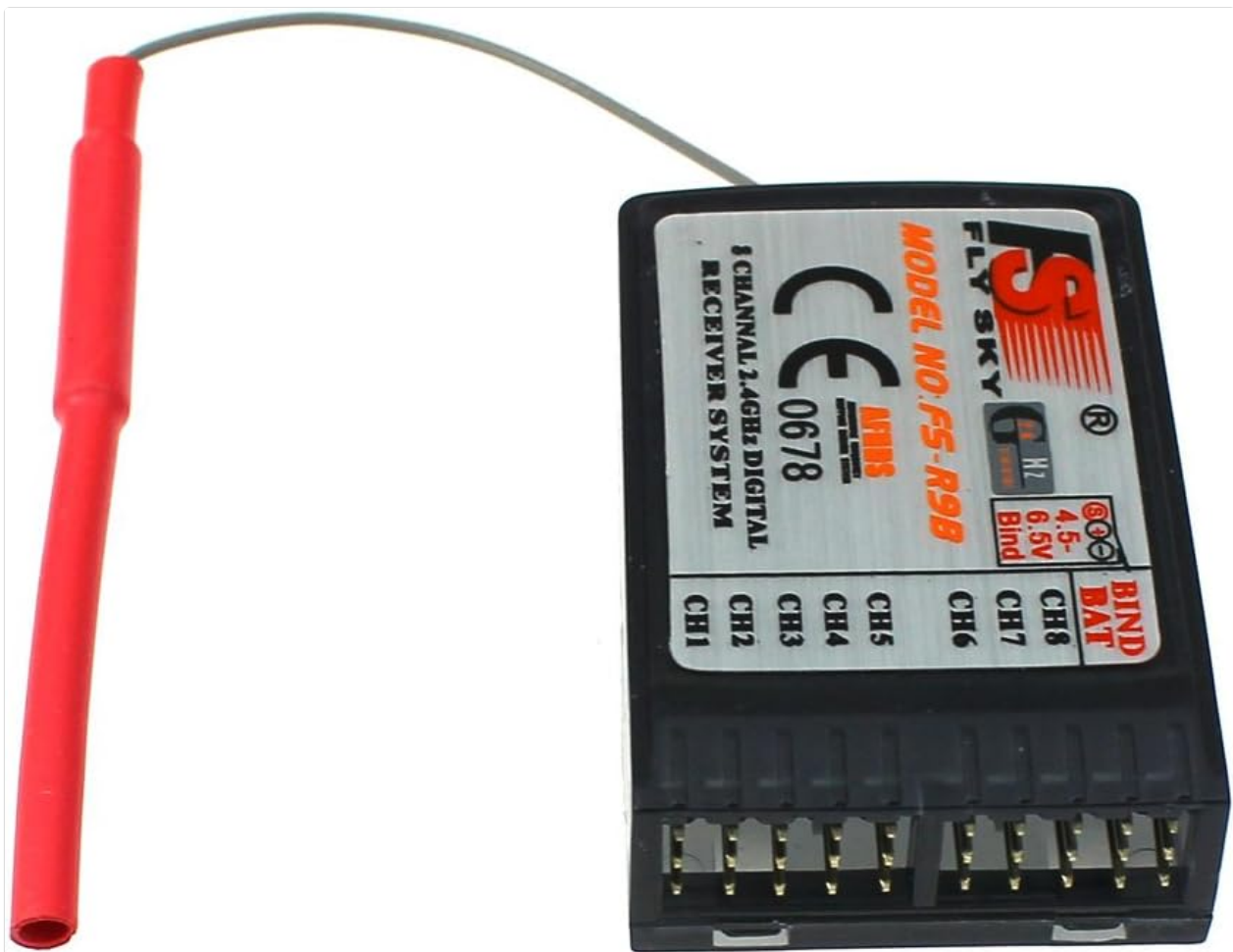
Image 5.1: The FS-R9B receiver showing its antenna and the clearly labeled channel ports (CH1-CH8) for connecting various RC components.

Connection Guide:

- **Channel 1 (CH1):** Typically Aileron
- **Channel 2 (CH2):** Typically Elevator
- **Channel 3 (CH3):** Typically Throttle (connect ESC here)
- **Channel 4 (CH4):** Typically Rudder
- **Channels 5-8 (CH5-CH8):** Auxiliary channels for flaps, landing gear, lights, etc.
- **BIND/BAT Port:** Used for binding and can also serve as an additional power input if not used for binding.

Powering On/Off Sequence:

1. Always power on your **transmitter first**.
2. Then, power on your **receiver** (via the ESC or a dedicated battery).
3. When powering off, always power off your **receiver first**.
4. Then, power off your **transmitter**.

Following this sequence prevents unintended control inputs or loss of control during power cycles.

6. MAINTENANCE

Proper maintenance ensures the longevity and reliable performance of your FS-R9B receiver.

- **Keep Clean:** Regularly clean the receiver's exterior with a soft, dry cloth. Avoid using solvents or harsh chemicals.
- **Protect from Elements:** Shield the receiver from moisture, dust, and extreme temperatures. Consider using a waterproof enclosure if operating in damp conditions.
- **Secure Mounting:** Ensure the receiver is securely mounted within your model to prevent vibrations from affecting its performance or causing damage. Use foam or double-sided tape to dampen vibrations.
- **Antenna Placement:** Position the antenna away from metal objects and carbon fiber structures to maximize signal reception. Ensure the antenna is not kinked or damaged.
- **Inspect Connections:** Periodically check all wire connections to the receiver for looseness or damage.

7. TROUBLESHOOTING

If you encounter issues with your FS-R9B receiver, refer to the following troubleshooting guide:

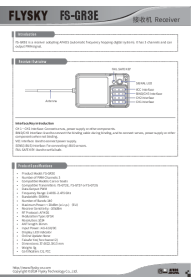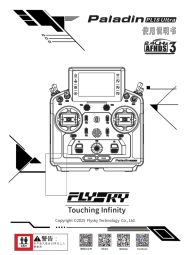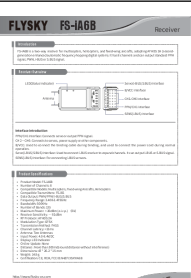| Problem	Possible Cause	Solution
Receiver LED not solid after powering on	Not bound to transmitter, transmitter off, or out of range.	Perform binding procedure again. Ensure transmitter is on and within range. Check power supply to receiver.
No control response	Incorrect servo/ESC connection, receiver not bound, or faulty component.	Verify all connections are correct. Re-bind the receiver. Test components individually if possible.
Reduced range or intermittent signal	Antenna obstruction/damage, interference, or low transmitter/receiver battery.	Check antenna for damage and proper placement. Avoid operating near strong interference sources. Ensure batteries are fully charged.
Binding fails repeatedly	Incorrect binding procedure, faulty bind plug, or incompatible transmitter.	Review and repeat the binding steps carefully. Try a different bind plug. Confirm transmitter compatibility (FS-TH9X).

8. SAFETY INFORMATION

Operating RC equipment requires adherence to safety guidelines to prevent injury or damage.

- Always operate RC models in open areas, away from people, animals, and property.
- Ensure all batteries are fully charged before operation.
- Perform a range check before each flight or operation.
- Never operate RC models near power lines, roads, or airports.
- Keep hands and loose clothing away from propellers and moving parts.
- If you are new to RC, seek guidance from experienced hobbyists or join a local RC club.
- This product is recommended for users aged 14 years and up.

9. WARRANTY AND SUPPORT

For warranty information or technical support regarding your Flysky FS-R9B receiver, please refer to the documentation provided with your purchase or contact Flysky customer service directly. Keep your proof of purchase for warranty claims.

Related Documents - FS-R9B

	[Flysky FS-GR3E AFHDS 3-Channel RC Receiver User Manual](#) User manual for the Flysky FS-GR3E AFHDS 3-channel RC receiver, covering introduction, specifications, binding, failsafe settings, and compliance information.
	[Paladin PL18 Ultra	Flysky 18](#) Flysky Paladin PL18 Ultra 18 2.4GHz AFHDS 3 Paladin PL18 Ultra Paladin PL18 Ultra
	[Flysky FS-TH9X Instruction Manual: Your Guide to RC Transmitter Operation](#) Explore the Flysky FS-TH9X 9-channel radio control system with this comprehensive instruction manual. Learn essential setup, programming, and operational procedures for optimal performance and safety in RC flying.
	[Flysky FS-iT4S Digital Proportional Radio Control System Instruction Manual](#) This instruction manual provides detailed information on the Flysky FS-iT4S digital proportional radio control system, covering setup, operation, function settings, and product specifications for RC models like cars and boats.
	[FlySky FS-iA6B Receiver: Features, Specifications, and Binding Guide](#) Detailed information on the FlySky FS-iA6B 2.4GHz 8-channel receiver, including its features, product specifications, interface descriptions, binding process, and compliance certifications. Suitable for multicopters, helicopters, and fixed-wing aircraft.

[Instrukcja obsługi systemu radiowego FlySky FS-i6X](#)

Szczegółowy podręcznik użytkownika dla systemu radiowego FlySky FS-i6X i odbiornika FS-iA6, zawierający informacje o bezpieczeństwie, funkcjach systemu, konfiguracji i specyfikacjach.