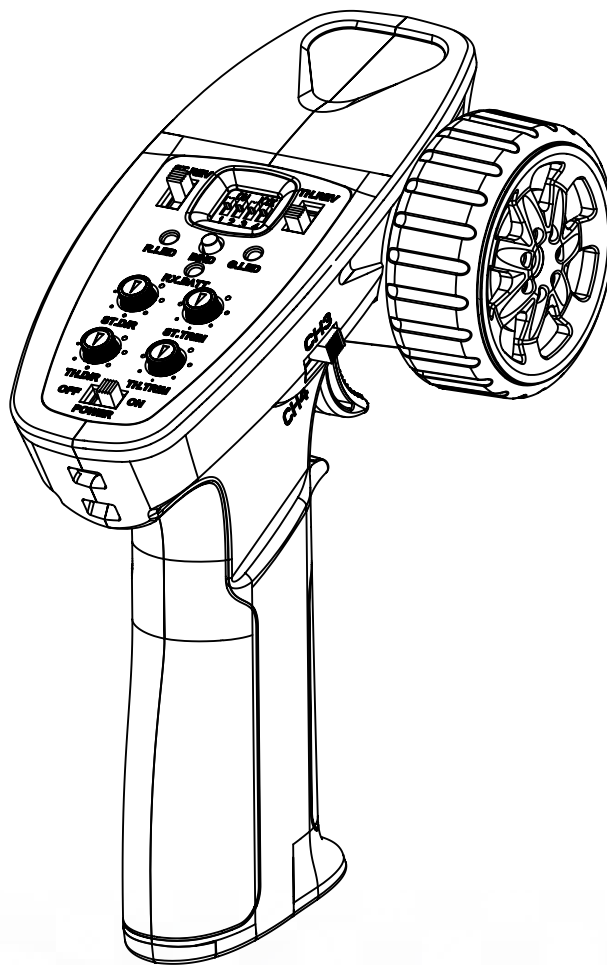


FS-MG41-BS&FS-R4A3-BS

USER MANUAL

FLYSKY

Digital Proportional Radio Control System



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WARNING:

This product is only for 15 years
old or above.



Thank you for purchasing our products.

Read the manual carefully to ensure your personal safety as well as the safety of your equipment.

If you encounter any problems during using, please refer to this manual first. If the problem is still not resolved, please contact the local dealer directly or contact the customer service staff via the website below:

www.flysky-cn.com




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1. Safety

1.1 Safety Symbols

Pay close attention to the following symbols and their meanings. Failure to follow these warnings could cause damage, injury or death.

 Danger	• Not following these instructions may lead to serious injuries or death.
 Warning	• Not following these instructions may lead to major injuries.
 Caution	• Not following these instructions may lead to minor injuries.

1.2 Safety Guide



Prohibited



Mandatory



- Do not use the product at night or in bad weather like rain or thunderstorm. It can cause erratic operation or loss of control.
- Do not use the product when visibility is limited.
- Do not use the product on rain or snow days. Any exposure to moisture (water or snow) may cause erratic operation or loss of control.
- Interference may cause loss of control. To ensure the safety of you and others, do not operate in the following places:
 - Near any site where other radio control activity may occur
 - Near power lines or communication broadcasting antennas
 - Near people or roads
 - On any body of water when passenger boats are present
- Do not use this product when you are tired, uncomfortable, or under the influence of alcohol or drugs. Doing so may cause serious injury to yourself or others.
- The 2.4GHz radio band is limited to line of sight. Always keep your model in sight as a large object can block the RF signal and lead to loss of control.
- Do not touch any part of the model that may generate heat during operation, or immediately after use. The engine, motor or speed control, may be very hot and can cause serious burns.



- Misuse of this product may lead to serious injury or death. To ensure the safety of you and your equipment, read this manual and follow the instructions.
- Make sure the product is properly installed in your model. Failure to do so may result in serious injury.
- Make sure to disconnect the receiver battery before turning off the transmitter. Failure to do so may lead to unintended operation and cause an accident.
- Ensure that all servos operate in the correct direction. If not, adjust the direction first.
- Make sure the model stays within the systems maximum range to prevent loss of control.



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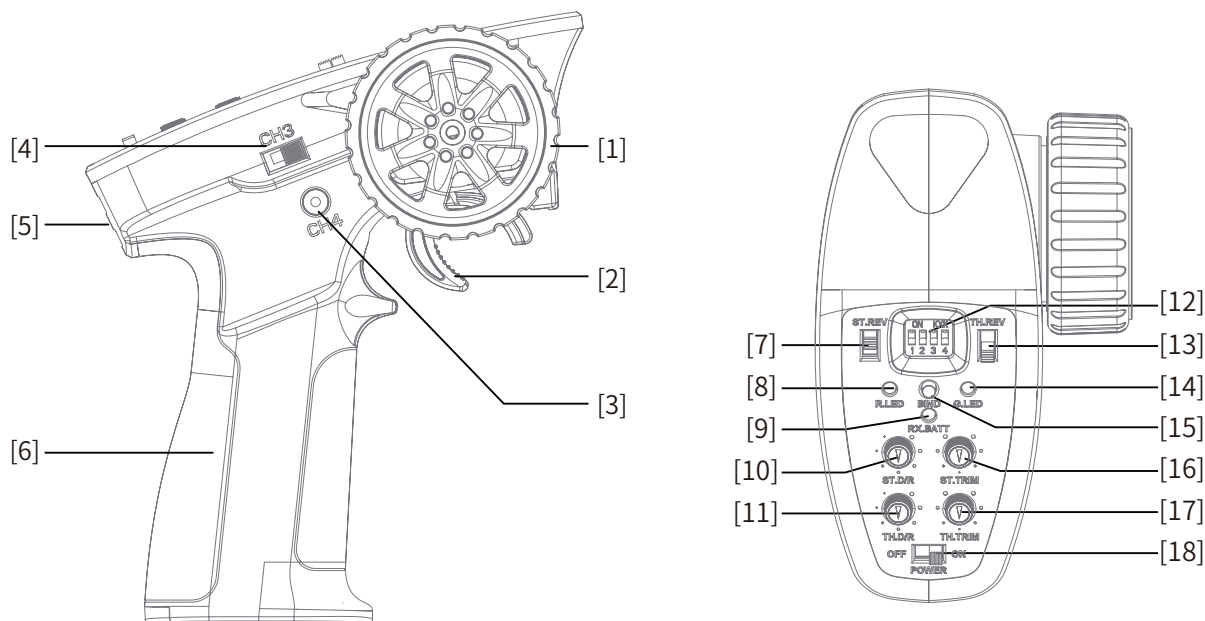


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2.Introduction

The FS-MG41-BS is a simplified 4-channel transmitter that adopts the 2.4GHz 2A-BS Automatic Frequency Hopping Digital System. The transmitter is lightweight and compact in design, comfortable and ergonomic. It has a beginner mode and is easy for beginner players to use.

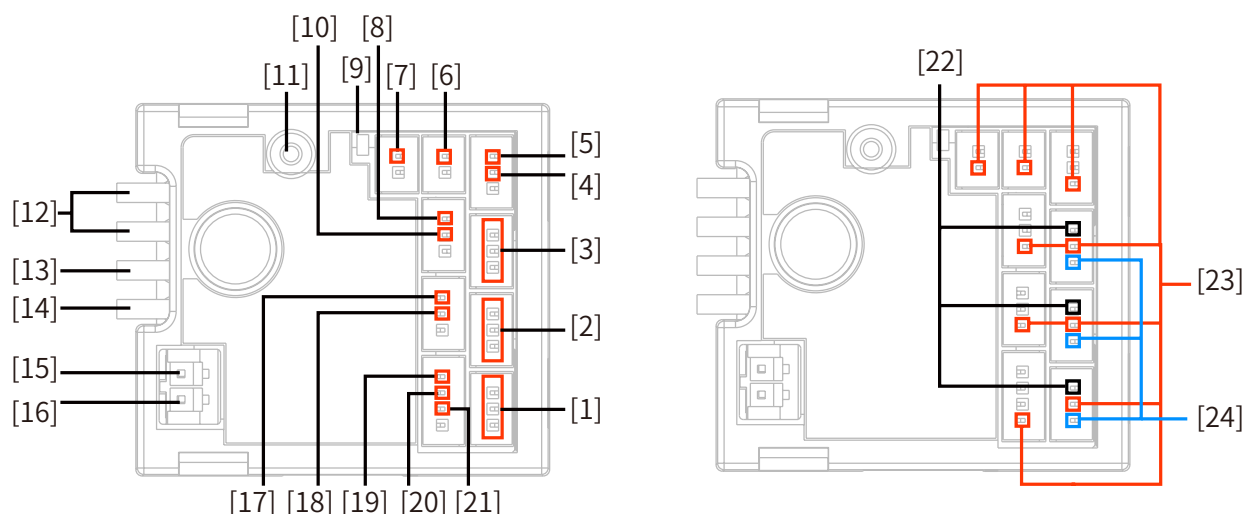
2.1 Transmitter Overview



[1]	Steering Wheel, 35 degrees on each side (CH1)	[10]	ST.D/R, to adjust the D/R for steering channel.
[2]	Throttle Trigger, 25 degrees forward and 12.5 degrees backward (CH2)	[11]	TH.D/R, to adjust the D/R for throttle channel.
[3]	Button Switch (CH4) [It is a flipping type button.]	[12]	Toggle Switch, to set the related function of ESC.
[4]	Three-position Toggle Switch (CH3)	[13]	TH.REV, Throttle Channel Reverse Button
[5]	Lanyard Hole	[14]	G.LED, Status Indicator
[6]	Handle, 4*AAA Battery Compartment	[15]	BIND Button
[7]	ST.REV, Steering Channel Reverse Button	[16]	ST.TRIM, to adjust the trim of steering channel.
[8]	R.LED, Power Indicator	[17]	TH.TRIM, to adjust the trim of throttle channel.
[9]	RX.BATT, ESC Battery Power Indicator	[18]	POWER ON/OFF, Power Switch



2.2 Receiver Overview (FS-R4A3-BS)



[1]	CH1	[13]	Battery Line Anode
[2]	CH3	[14]	Battery Line Ccathode
[3]	CH4	[15]	Motor Interface "M+"
[4]	Headlight Interface	[16]	Motor Interface "M-"
[5]	Right Turn Signal Light Interface	[17]	Left Turn Signal Light Interface
[6]	Fog Light Interface	[18]	Right Turn Signal Light Interface
[7]	Fog Light Interface	[19]	Tail Light Interface
[8]	Left Turn Signal Light Interface	[20]	Brake Light Interface
[9]	LED	[21]	Backup Light Interface
[10]	Headlight interface	[22]	Signal Pin
[11]	Antenna	[23]	+ (CH Interface/Light Interface Anode)
[12]	Power Switch	[24]	- (CH Interface/Light Interface Cathode)

Note: CH1, CH3 and CH4 interfaces use standard 1.25mm*3Pin terminal blocks. The car light interface uses standard 1.25mm terminal blocks. The battery interface uses an Molex 51005 female connector. The motor interface is a PH2.0 female terminal blocks.

2.2.1 Receiver LED

The LED status indicates the power supply state of the receiver and its working state.

Off: The receiver is not powered on.

Solid on in red: The receiver is connected to the power supply. It works normally.

Fast flashing: The receiver is in the bind mode.

Slow flashing: The LED flashes slowly when the transmitter is powered off, unbound, or no signal.



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3. Getting Started

Before operation, install the battery and connect the system as instructed below.

3.1 Transmitter Battery Installation

	Danger	• Only use specified battery (X4 AAA batteries).
	Danger	• Do not open, disassemble, or attempt to repair the battery.
	Danger	• Do not crush/puncture the battery, or short the external contacts.
	Danger	• Do not expose to excessive heat or liquids.
	Danger	• Do not drop the battery or expose to strong shocks or vibrations.
	Danger	• Always store the battery in a cool, dry place.
	Danger	• Do not use the battery if damaged.

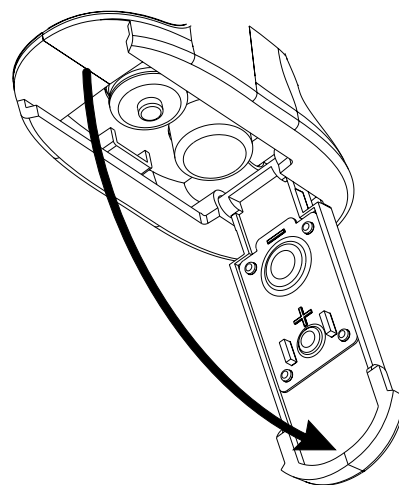
Battery Type:AAA

Battery Installation:

1. Open the battery compartment cover.
2. Insert 4 fully-charged AAA batteries into the compartment. Then make sure that the battery makes good contact with the battery compartment's contacts.
3. Replace battery compartment cover.

Low Battery Alarm: When the battery is lower than 4.2V, the G.LED on the transmitter panel will flash slowly.

Note: When installing the batteries, be careful to handle the positive and negative poles. (As shown in the picture on the right)



3.2 Receiver and Servo Installation

Make sure that the receiver is mounted in an appropriate location within the model, to ensure a stable signal, maximum range and to mitigate external interference, follow these guidelines:

Pay attention to the following when installing the receiver:

1. Make sure the receiver is not installed near motors or sources of electrical noise.
2. Keep the receiver's antenna away from conductive materials such as carbon or metal. To ensure normal function, make sure there is a gap of at least 1cm between the antenna and the conductive material.

	Caution	• To prevent damage do not power on the receiver during installation.
---	----------------	---





4. Instructions

After setting up, follow the instructions below to operate the system.

4.1 Power On

Follow the steps below to turn on the transmitter:

1. Check to make sure that that battery is fully charged and installed correctly.
2. Toggle the switch to the [ON] position, and the R.LED will be solid on.
3. Power on the receiver.
 - For safety, always power on the transmitter before the receiver.

 Warning	• Operate with caution in order to avoid damage or injury.
 Warning	• Make sure that the throttle trigger is at its neutral position and the switches are set to their proper position.

4.2 LED Indicator

1. R.LED: The red power indicator;
2. G.LED: The green status indicator;
3. RX.BATT: ESC battery power indicator.
 - When the power is high, the RX.BATT LED will be solid on in green.
 - When the power is medium, the RX.BATT LED will be solid on in orange.
 - When the power is low, RX.BATT LED will be solid on in red.
 - When the power is ultra low, the RX.BATT LED will be flash slow in red.
 - When the receiver is not connected, the RX.BATT LED will maintain the last indicated state.

4.3 Binding

The transmitter and receiver have already been bound at the factory.

However if the receiver needs to be replaced or additional receivers bound follow these steps:

1. Turn on the transmitter while holding the BIND button, then the transmitter will enter the bind mode. At this time, the G.LED will start flashing quickly. Once in bind mode release the BIND button.
2. Turn on the receiver, and it will wait for 1 second for connection. If without connection, the receiver will enter the binding mode automatically.
3. Once the binding is successful, the receiver LED and the G.LED of the transmitter will be solid on.

Note: When binding, put the transmitter into bind mode first, then the receiver. If the binding is not completed within ten seconds, the LED of the receiver will enter its slow flashing state.

- | |
|---|
| • Applicable to the FS-MG41-BS transmitter and the FS-R4A3-BS receiver. Different receivers have different bind procedures. For more information visit the FLYSKY website for manuals and other related information. |
| • Product information is updated regularly, please visit our website for more information. |



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4.4 Stick Calibration

This function is used to set the neutral position for throttle trigger and steering wheel.

Every transmitter is calibrated before leaving the factory, however if recalibration is required, please follow these steps:

1. Turn and hold the steering wheel clockwise to the max travel point and push the throttle trigger forwards as far as possible, and at the same time turn on the transmitter, the transmitter will be in calibration mode.
 - The R.LED and G.LED will work in two-flash-one-off mode.
 - The RX.BATT LED will be solid on in yellow.
2. Calibrate steering wheel: Turn the steering wheel to max and min travel point in clockwise and counterclockwise.
 - The R.LED will be off.
 - The RX.BATT LED will be solid on in red.
3. Throttle trigger calibration: Push/pull the throttle trigger to forward/backward as far as it will go.
 - When the calibration is completed, the G.LED will be off.
 - The RX.BATT LED will be solid on in green.
4. Both steering wheel and throttle trigger have finished the calibration.
 - The RX.BATT LED will be off.
5. Once the calibration is finished, press the BIND button to save and exit.

4.5 Power Off

Follow the steps below to turn off the system:

1. Turn off the receiver.
2. Toggle the transmitter's power switch to the [OFF] position.



Danger

- **Make sure to disconnect the receiver power before turning off the transmitter. Failure to do so may lead to damage or serious injury.**



5. System Functions

This section focuses on the functions and how to use them.

5.1 Channel Description

The transmitter outputs a total of 4 channels, which are assigned as below, as well as the functions.

- CH1 Channel: The assigned control is the steering wheel. CH1 controls the steering to enable a car to turn left or right.
- CH2 Channel: The control is the throttle trigger. CH2 controls the throttle to enable a car to move forward or backward.
- CH3 Channel: The control is the CH3 three-position switch. Users can customize the channel function. For example, function as a fast /slow-position servo channel.
- CH4 Channel: The control is the CH4 button switch. Users can customize the channel function. For example, control the car lights (short-press to switch the car light mode), and switch the drive control/four-wheel steering function.

5.2 Channel Reverse

This function is used to adjust the action direction of the servo or motor.

The ST.REV / TH.REV switches are the reverse buttons for CH1 and CH2. If the switch is up it indicates reverse, and the down indicates normal.

5.3 Trims

The ST.TRIM switch is used to adjust the trim for CH1 (steering), and can also adjust the trim for CH3 as multiplexing mode. The TH.TRIM switch is used to adjust the trim for CH2(throttle), and can also adjust the trim for CH4.

Refer to [5.5 Mode Switching] for multiplexing switching mode.

Adjustment range: -120us ~ +120us;

ST.TRIM/TH.TRIM: Counterclockwise adjustment to increase the trim value. The maximum value is 120us.

ST.TRIM/TH.TRIM: Clockwise adjustment to decrease the trim value. The minimum value is -120us.

Note: After the throttle trim is changed, the receiver needs to be re-powered on to recognize the new throttle neutral. Otherwise, an exception may occur during vehicle reversing.



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5.4 D/R

The ST. D/R switch is used to adjust the servo travel amount, and can also adjust the travel amount for CH3 as multiplexing mode.

The TH.D/R switch is used to adjust the servo travel amount for CH2(throttle), and can also adjust the travel amount for CH4.

Refer to [5.5 Mode Switching] for multiplexing switching mode.

Adjustment range: 0-120%;

ST.D/R: Counterclockwise adjustment to increase the servo travel amount. The maximum value is 120%.

ST.D/R: Clockwise adjustment to decrease the servo amount. The minimum value is 0%.

TH.D/R: Counterclockwise adjustment to increase the servo amount. The maximum value is 120%.

TH.D/R: Clockwise adjustment to decrease the servo amount. The minimum value is 0%.

5.5 Mode Switching

This function is for reusing the ST.TRIM and ST.D/R switches for different channels (Refer to [5.3 Trims] and [5.4 D/R]).

Setup:

Under normal power-on condition, quickly press the BIND button twice (within 1 second) to switch between mode 1 and mode 2. By default, the mode 1 is used.

Mode 1: The R.LED is solid on, and the G.LED is off. The ST.TRIM switch is for CH1 trim adjustment, the ST.D/R switch is for CH1 D/R adjustment. The TH.TRIM switch is for CH2 throttle trim adjustment, and the TH.D/R switch is for the CH2 D/R adjustment.

Mode 2: The R.LED and the G.LED are flashing alternately. The ST.TRIM switch is for CH3 trim adjustment, the ST.D/R is for CH3 D/R adjustment. The TH.TRIM switch is for CH4 trim adjustment, and the TH.D/R switch is for CH4 D/R adjustment.

5.6 Failsafe

The failsafe function is used to protect the model and personnel when the receiver is out-of-control.

The failsafe for CH2 is enabled by default, the ESCI will enter the brake state when the receiver is out-of-control. By default, the failsafe for CH1, CH3 and CH4 channels have not set, and can be set at the transmitter side, and these three channels will maintain the last output in case of out-of-control.

Setup:

In the normal power-on state, set the control corresponding to the channel to be configured with failsafe to the preset position, meanwhile, press and hold the BIND button for 3 seconds to set the output value as the failsafe value. And if the G.LED flashes for 2 seconds, it indicates that the setting is successful. Then the failsafe value set will output in case of out-of-control.



5.7 Beginner Mode

Beginner mode is designed for the people who is new to the hobby.

In this mode the throttle channel has been limited to output 50 percent, the channel range defaults has been set to 1250~1500~1750us. By default, the mode is normal mode.

Setup:

To switch between beginner mode and normal mode, press and hold the CH4 button while turning the steering wheel completely counterclockwise as far as it can, and at the same time, power on the transmitter. When the G.LED works in two-flash-one-off mode for 3 seconds, then the beginner mode has switched. In case of the G.LED is off, the normal mode is switched.

5.8 Four-wheel Steering

The transmitter supports four-wheel steering function which is used to set the wheels that control the steering of the vehicle. This function adapts partial crawler types with steering on both front and rear wheels.

The four-wheel steering function is controlled by CH4 channel, and the control is CH4 button. Switch to four-wheel steering function firstly, then set the control mode.

Switching the drive control/four-wheel steering function

In the normal power-on state, press both the BIND button and the CH4 button to switch between the drive control and four-wheel steering. The drive control is the default mode.

Note: The setting will be save when the transmitter turns off.

After switching to four-wheel steering function, you can set the control mode in turn: Front wheel steering, front and rear wheels reversal steering, front and rear wheels in the same steering, rear wheel steering (normal) and rear wheel steering (reverse).

Setup:

Press and hold the CH4 button over 2 seconds to switch the mode. Switch one mode per press of the control. By default, it is front wheel steering.

5.9 Drive Control

The transmitter supports drive control function which is used to set drive control mode. The drive function is controlled by CH4 channel, and the control is CH4 button. Switch to drive control function firstly, then set the control mode.

Switching the drive control/four-wheel steering function

In the normal power-on state, press both the BIND button and the CH4 button to switch between the drive control and four-wheel steering. The drive control is the default mode.

Note: The setting will be save when the transmitter turns off.

After switching to drive control function, you can set the drive mode between 2-wheel drive and 4-wheel drive.

Setup:

Press and hold the CH4 button over 2 seconds to switch the mode. Switch one mode per press of the control.



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5.10 ESC Parameters Setting

Running Mode	Battery Type	Drag Brake	
 FWD/REV/BRK	 Lipo	 0%	 75%
 FWD/REV	 NiMH	 50%	 100%

Toggle Switch Sign

The Toggle Switch on the transmitter is used to set ESC parameters, that is, the Toggle Switch is located at different positions and the corresponding parameter values are different.

There are three parameters can be set for the ESC, which are "Running Mode", "Battery Type" and "Drag Brake". There are slide switches numbered 1, 2, 3, 4 on the transmitter panel. The above parameters can be set by toggling up and down.

Running Mode

FWD/REV/BRK(Forward/Reverse/Brake): This mode adopts "double click" reverse mode, that is, when the throttle trigger is pushed from natural range to the reverse area for the first time, the motor is only braking and will not reverse; when the throttle trigger is moved back to the natural range and pushed to the reverse area for the second time, it will reverse. This mode is applicable to general models.

FWD/REV(Forward/Reverse): This mode adopts "one click" reverse mode, that is, when the throttle trigger is pushed from natural range to the reverse area, the motor immediately generates reverse action, which is generally applied to rock crawler.

Setup:

Toggle the No. 1 slide switch to the down, then the running mode is set to FWD / REV / BRK. Toggle the No. 1 slide switch to the up, then the running mode is set to FWD/REV.

Battery Type

There are LiPo and NiMH cells. It can be set according to the actual use.

Setup:

Toggle the No. 2 slide switch to the down, then the battery type is set to Lipo. Toggle the No. 2 slide switch to the up, then the battery type is set to NiMH.

Drag Brake Force

The drag brake means that when the throttle trigger moves from the forward or reverse area to natural range, it will produce certain braking force to the motor, the larger the value is, the greater the drag brake force is. Select proper braking force according to the actual situation.

Setup:

Toggle both the No. 3 and the No.4 slide switches to the down, then the drag brake force is set to 0%. Toggle the No. 3 slide switch to the down and the No.4 slide switch to the up, then the drag brake force is set to 50%. Toggle the No. 3 slide switch to the up and the No.4 slide switch to the down, then the drag brake force is set to 75%. Toggle both the No. 3 and the No.4 slide switches to the up, then the drag brake force is set to 100%.



6. FS-R4A3-BS Function Instructions

This chapter mainly introduces the precautions for using the FS-R4A3-BS receiver, as well as related functions.

6.1 Attentions

- Make sure the product is installed and calibrated correctly, failure to do so may result in serious injury.
- Please carefully check each power device and car frame instructions to ensure the power matching is reasonable before use. Avoid damaging power system due to incorrect matching.
- Do not let the external temperature of the system exceed 90°C /194 °F , because high temperature will damage the power system.
- Make sure the receiver's battery is disconnected before turning off the transmitter, failure to do so can result out of control. Unreasonable setting of the Failsafe may cause accidents.
- After use, remember to disconnect the battery and the ESC. If the battery isn't disconnected, the ESC will consume electric energy all the time even if it is off. It will discharge completely if connect the battery for a long time, thus resulting in the failure of the battery or the ESC. We are not responsible for any damage caused by this!
- Make sure the receiver is mounted away from motors or any device that emits excessive electrical noise.
- Keep the receiver's antenna at least 1cm away from conductive materials such as carbon or metal.
- Do not power on the receiver during the setup process to prevent loss of control.
- If the throttle trim is changed on the transmitter side, the receiver needs to be re-powered to recognize the new throttle neutral. Otherwise, an exception may occur during vehicle reversing.

6.2 Binding Instruction

If need to rebind the receiver and the transmitter, refer to 4.3 Binding for details.

6.3 Protect Function

The receiver supports low voltage protection and high voltage protection function.

Low Voltage Protection: When the receiver enters the low voltage protection state in case of detecting low voltage, CH2 motor channel has no output. Channels of CH1, CH3 and CH4 output normally, and all the lights flash slowly for prompt.

High Voltage Protection: When the receiver enters the high voltage protection state, all channels have no output. All car lights flash quickly for prompt.

The receiver supports the overheating protection and the blocking protection function.

Overheating Protection: The receiver will enter the overheating protection state in case of the high internal temperature of the ESC, the CH2 motor channel won't output, but the other channels will output normally. All car lights flash quickly for prompt. The CH2 motor channel will output normally when the temperature is normal.

Blocking Protection: When the external motor is blocked, it enters the blocking protection state, to protect the ESC and the motor. The CH2 motor channel won't output, but the other channels will output normally. The CH2 motor channel will output normally when there is no blocking.



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6.4 Car Light Control

The car light control is mainly to implement the changeover of lighting states and lighting modes by the setting of the transmitter. All car lights will be on for 1second as the self-check display when the receiver is powered on.

This receiver is preset with five modes for controlling model car lights. In each mode, the on/off states of backup lights are consistent; in other words, the backup light is in a high-light state when the model car backs up; otherwise, it is in off state. The turn signal light(including left turn signal light and right turn signal light), headlight, stop light, tail light and fog light have different on/off states as follows:

Default mode: In this mode, the turn signal light is in off state regardless of whether the model car makes a turn or not; When braking, the stop light is in a high-light state, and otherwise, it is in off state; The headlight, tail light and fog light are in off state.

Mode A: In this mode, the turn signal light is in a slow flashing state when the model car makes a turn; When braking, the stop light is in a high-light state, and when not braking, it is in a low-light state; The headlight is in a low-light state; The tail light and fog light are in off state.

Mode B: In this mode, the turn signal light is in a slow flashing state when the model car makes a turn; When braking, the stop light is in a high-light state, and when not braking, it is in a low-light state; The headlight is in a high-light state; The tail light and fog light are in off state.

Mode C: In this mode, the turn signal light is in a continuously slow flashing state regardless of whether the model car makes a turn or not; When braking, the stop light is in a high-light state, and when not braking, it is in a low-light state; The headlight is in a high-light state; The tail light and fog light are in solid on state.

Mode D: In this mode, the turn signal light is in a slow flashing state when the model car makes a turn; When braking, the stop light is in a high-light state, and when not braking, it is in off state; The headlight is in off state; The tail light and fog light are in solid on state.

Notes:

1. Press the **CH4** button of the transmitter to switch the working mode, one mode per press (Default Mode, Mode A, Mode B, Mode C and Mode D are switched in turn).
2. Every time the receiver is turned on, the car light control mode is in Default Mode.
3. Mode C is an emergency light working state. In this mode, the left and right turn signal lights flash synchronously and slowly as emergency lights.
4. This receiver identifies the neutral positions of Steering CH1 and Throttle CH2 automatically when it is powered on. It recommends to power on the receiver again after the trims of the transmitter are adjusted.

6.5 ESC Function Instructions

Connect Related Equipments

Make sure the receiver is off before connection. Then connect the motor with M+ and M- of the receiver and connect the servo to the 3Pin interface(" ", "+" and "S" are connected correspondingly). Finally, connect the battery to the power cable interfaces of the receiver correspondingly.

Calibrate the Throttle Neutral Position

1. After connecting related equipment as above, turn on the transmitter first, then move the throttle trigger to the



neutral position.

2. Turn on the switch of receiver at last. The receiver will automatically recognize the battery type when it is powered on again. Then it can run it.

Notes:

1. The ESC can be run after completing self-inspection (about 3 seconds) if power on, otherwise it cannot be operated normally.
2. If there is no power output, please check whether the throttle trim of the transmitter is set to the neutral position, the receiver will automatically recognize the neutral position of the trim throttle after restarting;
3. If the rotation direction is not correct during running, exchange the two cables connecting motor and receiver.
4. To make sure everything is ok, please turn on the transmitter first and then the receiver, and power off the receiver first and then the transmitter.

6.6 ESC Drag Brake Force

The receiver supports the function of setting drag brake force at the transmitter side. Refer to 5.10 ESC Parameters Setting for details.

6.7 ESC Running Mode

The receiver supports the function of setting running mode at the transmitter side. It can be set tow modes: FWD/REV and FWD/REV/BRK, and the default mode is FWD/REV/BRK, refer to 5.10 Parameter Setting for details.

6.8 ESC Battery Type

The receiver supports the function of setting battery type at the transmitter side. It can be set tow types: LiPo and NiMH, and the default type is LiPo, refer to 5.10 Parameter Setting for details.

6.9 Failsafe

The failsafe function is used to protect the model and personnel when the receiver is out-of-control. Refer to [5.6 Failsafe] for details.



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7. Product Specifications

This section contains the specifications of FS-MG41-BS transmitter and FS-R4A3-BS receiver.

7.1 Transmitter Specifications

Product Model	FS-MG41-BS
Channels	4
Model Type	Car or Boat
RF	2.4GHz ISM
Maximum Power	<20dBm (e.i.r.p.) (EU)
2.4GHz Protocol	2A-BS
Distance	>150m(Ground distance without interference)
Resolution	1024
Input Power	6V/DC or 1.5AAA*4
Charging Interface	None
Life time	According to Battery Type
Low Voltage Warning	<4.2V
Antenna Type	Single Built-in Antenna
Data Interface	None
Temperature Range	-10°C ~ +60°C
Humidity Range	20% ~ 95%
Online Update	None
Dimensions	118*73*145mm
Weight	130g
Certifications	CE, FCC ID: N4ZMG400, MIC: R210-167762, IC: 25584-MG4BS00



7.2 Receiver Specifications

Product Model	FS-R4A3-BS
Channnels	4
Number of Lights	7
Model Type	1:18 Simulation Car, Crawler Car
Applicable Motors	180 Brushed Motor
Input Power	NiMH (5~7Cell)/2S Lipo
RF	2.4GHz ISM
Maximum Power	<20dBm (e.i.r.p.) (EU)
2.4GHz Protocol	2A-BS
Distance	>150m (Ground distance without interference)
Resolution	1024
Continuous / Peak Current	10A/50A
BEC Output	6V/1A
Data Output	PWM
Antenna	Single Built-in Antenna
Waterproof	PPX4
Temperature Range	-10°C ~ +60°C
Humidity Range	20% ~ 95%
Online Update	None
Dimensions	33mm*30mm*12mm (Excluding capacitor)
Weight	11g
Certifications	CE, FCC ID: N4ZR4A31, MIC: R210-177092, IC: 25584-R4A31



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8. Package Contents

Transmitter*1(FS-MG41-BS)

Receiver*1(FS-R4A3-BS)



9. Certifications

9.1 DoC Declaration

Hereby, [Flysky Technology Co., Ltd.] declares that the Radio Equipment [FS-MG41-BS&FS-R4A3-BS] is in compliance with RED 2014/53/EU.

The full text of the EU DoC is available at the following internet address: www.flyskytech.com/info_detail/10.html

9.2 CE Warning

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

9.3 FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

1. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.
2. Move all your channels to the desired position.
3. Select [All channels] and then [Yes] in the confirmation box.



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9.4 Environmentally friendly disposal

Old electrical appliances must not be disposed of together with the residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free. The owner of old appliances is responsible to bring the appliances to these collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of toxic substances.



CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

9.5 IC STATEMENT

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L' émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L' exploitation est autorisée aux deux conditions suivantes :

1. L' appareil ne doit pas produire de brouillage;
2. L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

IC: 25584-MG4BS00

IC: 25584-R4A31



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Release date: 2023-06-01



FCC ID: N4ZMG400

FCC ID: N4ZR4A31

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