Noble *Pro*
USER MANUAL

FLYSKY
Touching Infinity

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2.4GHz AFHDS 3

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

Catalog

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.
⚠ Attention	• 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.
- Never grip the transmitter antenna during operation. It significantly degrades signal quality and strength and may cause 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 motors operate in the correct direction. If not, adjust the direction first.
- Make sure the model flies within a certain distance. Otherwise, it would cause loss of control.

Noble Pro

2. Product Introduction

This product uses 2.4GHz, third generation, automatic frequency hopping digital system, consisting of a Noble Pro (NB4 Pro for short) transmitter, FGr8B receiver, and FGr4B receiver. It supports output in 18 channels. In addition, the product implements extreme-speed output on 2 channels. A cell phone holder with Noble Pro is more convenient for users to perform monitoring in real time. It is also compatible with model cars, boats, and etc. It supports a USB simulator function (enabled by default).

2.1 System Features

AFHDS3 (third-generation automatic frequency hopping digital system) is a newly developed digital wireless system. It is compatible with single antenna bidirectional real-time data packet transmission and data stream transmission. With the advantages that come with the WS2A wireless system and the new 2.4G chip, the system can dynamically set: number of channels, channel resolution, range, anti-interference requirements and latency to meet the needs of different users.

Single Antenna Bidirectional Real-time Data Transmission	The system supports one-way and two-way connections. When the transmitter is working in oneway transmission way, the receiver can receive data from the transmitter. When the transmitter is working in two-way transmission way. The receiver can receive data from the transmitter and the transmitter can also receive data from the receiver, as well as the information cross from the temperature and speed sensor modules. This gives better control over the models and obtains information on its current status, so as to make model control more secure.
Uncorrected Data Transmission	The independent uncorrected data transmission module is built into RF system; it can send many different types of data including flight control data.
Intelligent RF configuration	Depending on hardware, certification, the amount of data to be transmitted, anti-interference, latency and distance requirements, the system intelligently adapts the corresponding RF configuration to meet the requirements of the user.
Multi-channel Frequency Hopping	This systems bandwidth ranges from 2.402GHz ISM to 2.480GHz. This band is divided in 140 channels. Each transmitter hops between 16 channels (32 for Japanese and Korean versions) in order to reduce interference from other transmitters.
Unique ID Recognition System	Each transmitter and receiver has it's own unique ID. Once the transmitter and receiver have been bound, the ID will be saved. When the syetem is working,if the IDs are matched, the connection will be connect, otherwise, there is no connection between transmitter and receiver. This unique ID recognition syetem resists the interference so as to make the system stabler and more reliable.
Low Power Consumption	The system is built using highly sensitive low power consumption components, maintaining high receiver sensitivity, while consuming as little as one tenth the power of a standard FM system, dramatically extending battery life.

2.2 Transmitter Overview

Cell phone holder

VR1

Wheel

Forced
shutdown
button
(placed at
the bottom
of the grip)

TR3

TR4

SW1

SW2

SW3

Battery
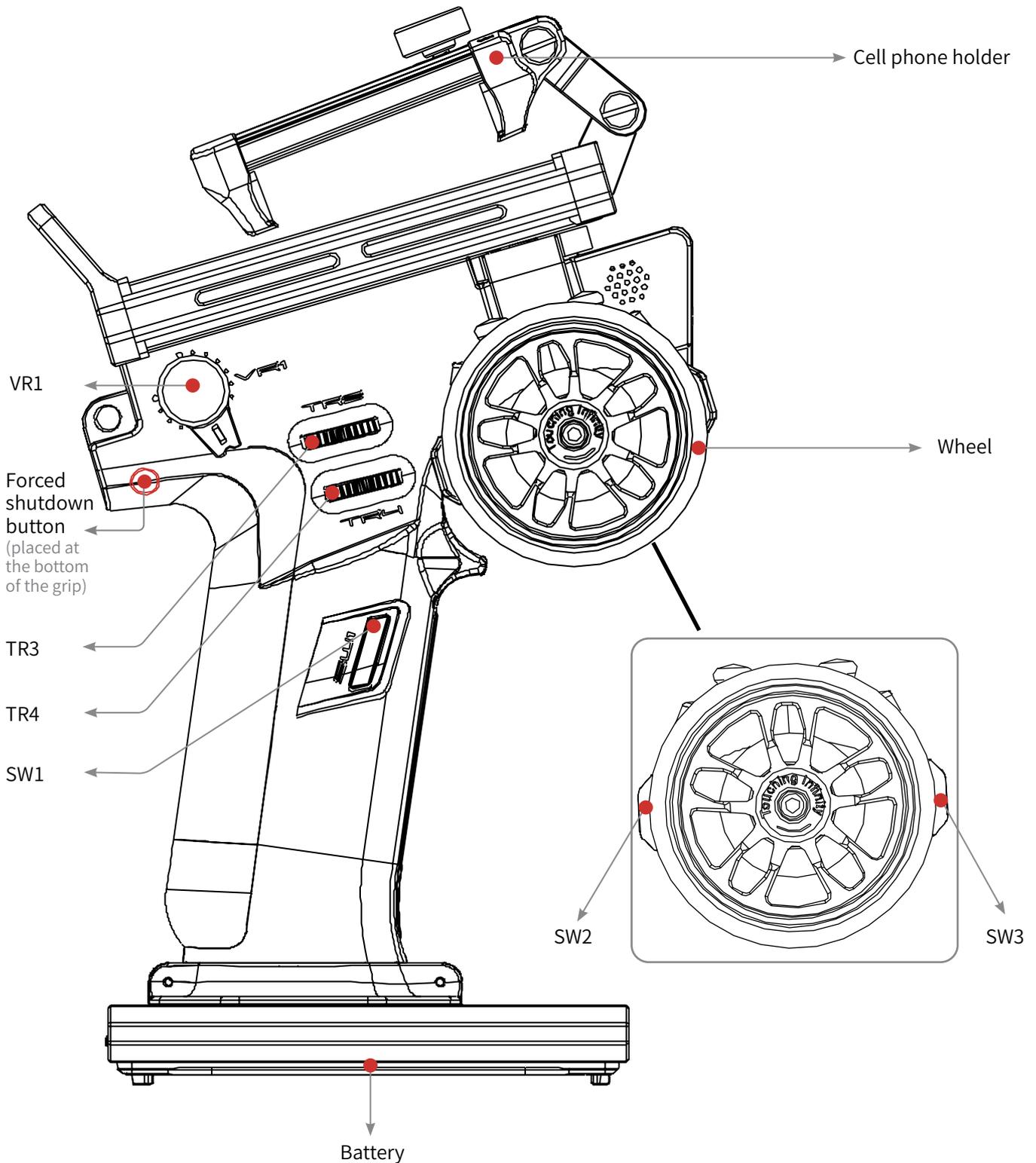
Note: If you can't shut down the transmitter properly, Please shut down the transmitter by pressing the force shutdown button on the transmitter. (Operation: pull the hand glue placed at the top of transmitter's grip or take off the whole handle glue. Use a relatively slender tool, insert the tool into the round hole on the right side of the grip(direction as shown in the figure above), and press the forced switch button in the round hole. After pressing the button, the transmitter will be shut down immediately.

Noble *Pro*

Holder connection hole

VR1

Lanyard Eye

TR3

TR4

SW1

Grip

Trigger spring adjsustment

Trigger size adjustment

Battery Port

USB Port (Charging), Update program, and connect the simulator interface.

Power Button

USB 5V 2A (Power Out)
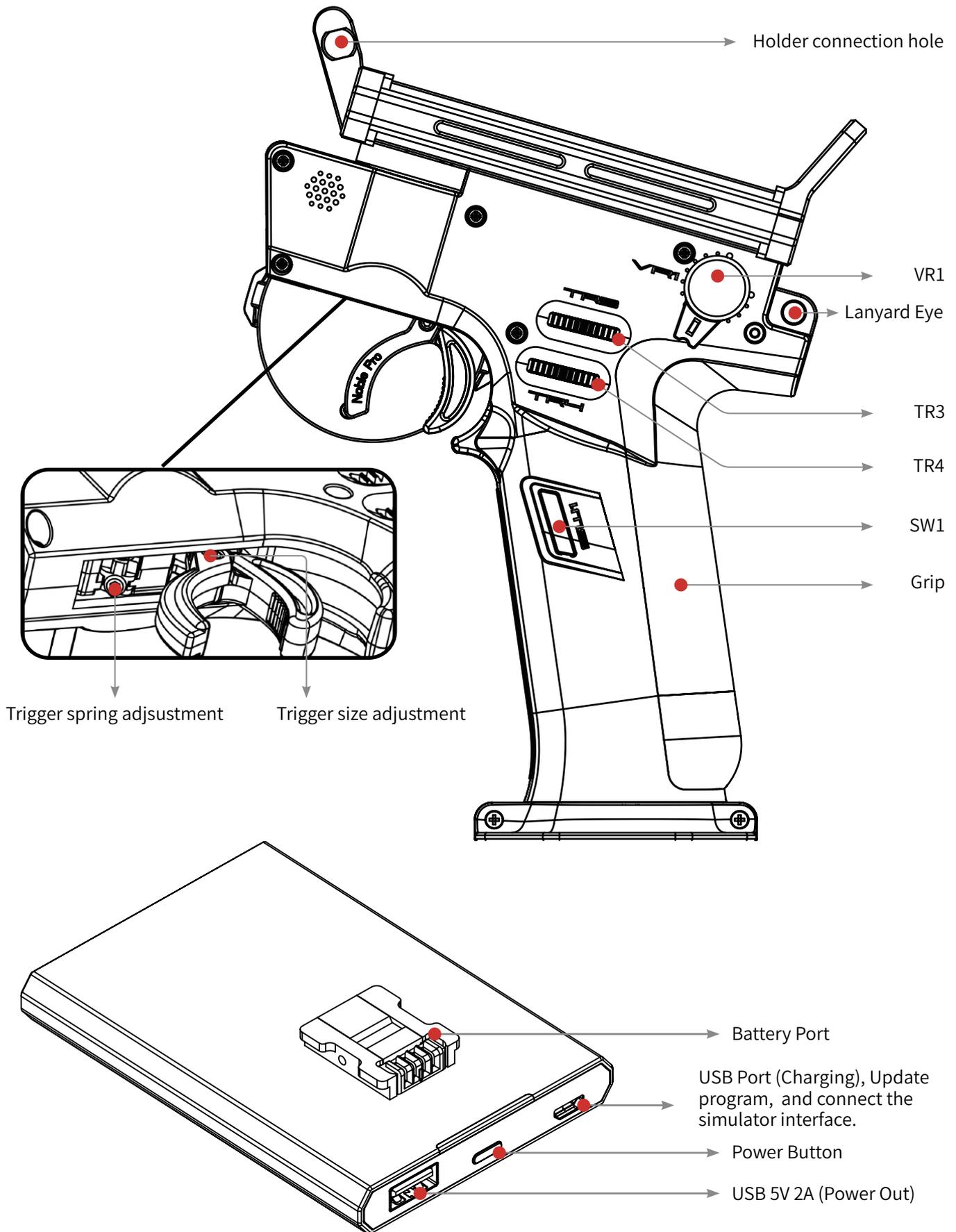
Base power button: Press for a short time to charge the battery at the transmitter handle and to charge external devices. Press 2 seconds to turn off the output of the power supply.

Screen

RGB LED

Power Button

Adjustable Arm

TR2 Trim

TR1 Trim
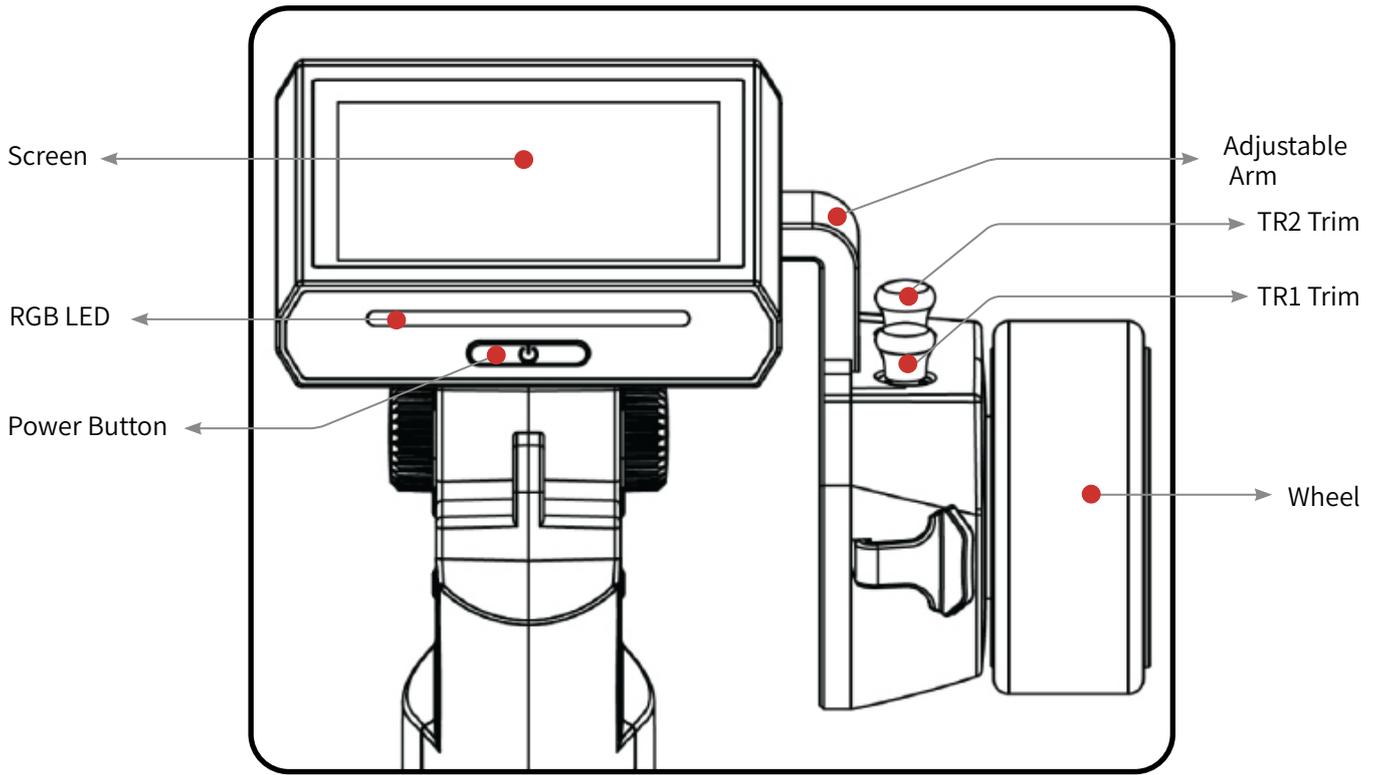
Wheel

Adjust the length of the cell phone holder

Wheel Tension Adjustment Screw
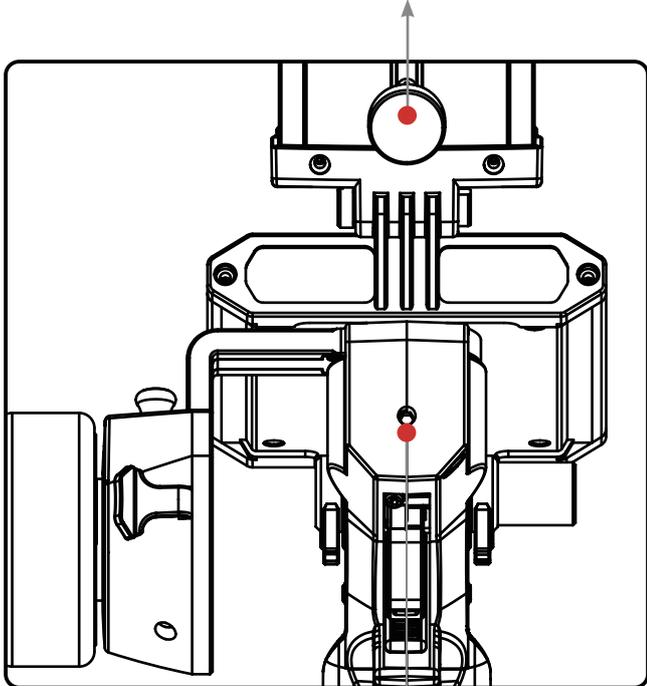
Trigger Position Adjustment Screw

2.3 Receiver Overview

LED NPA/8

Antenna

VCC/BVD
NPC/6
NPD/5
CH4
CH3
CH2
CH1

Bind NPB/7 S + -

FGr8B

LED

Antenna

VCC/BVD
Bind
CH4(NPA)
CH3(NPB)
CH2(NPC)
CH1(NPD)

S + -
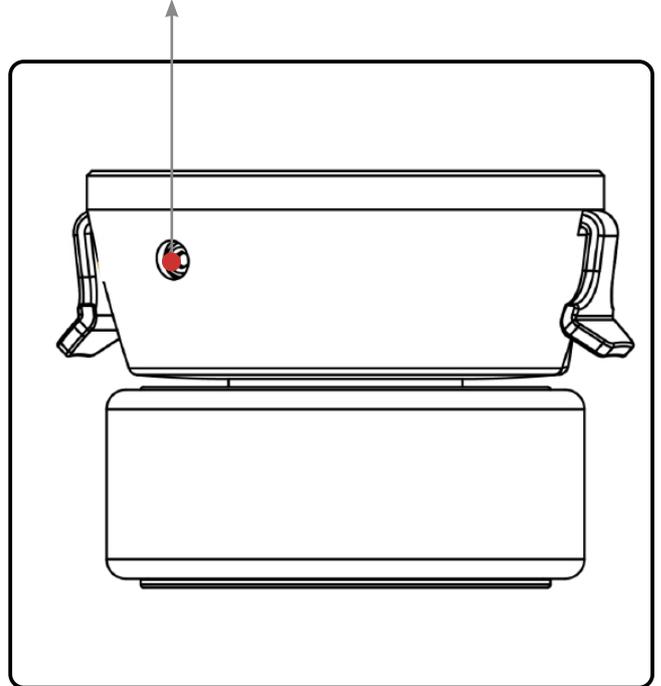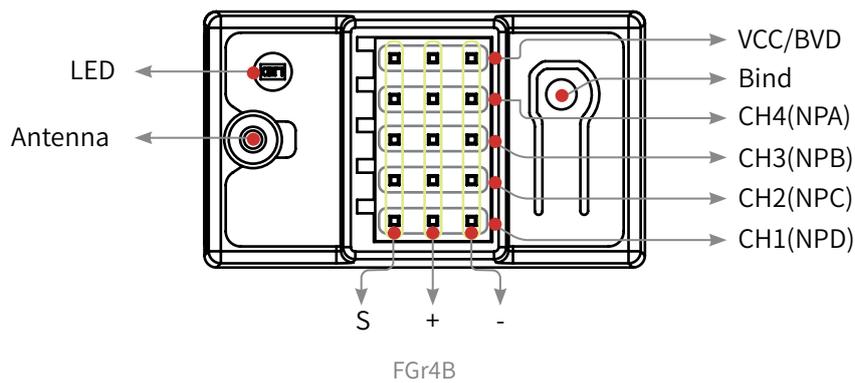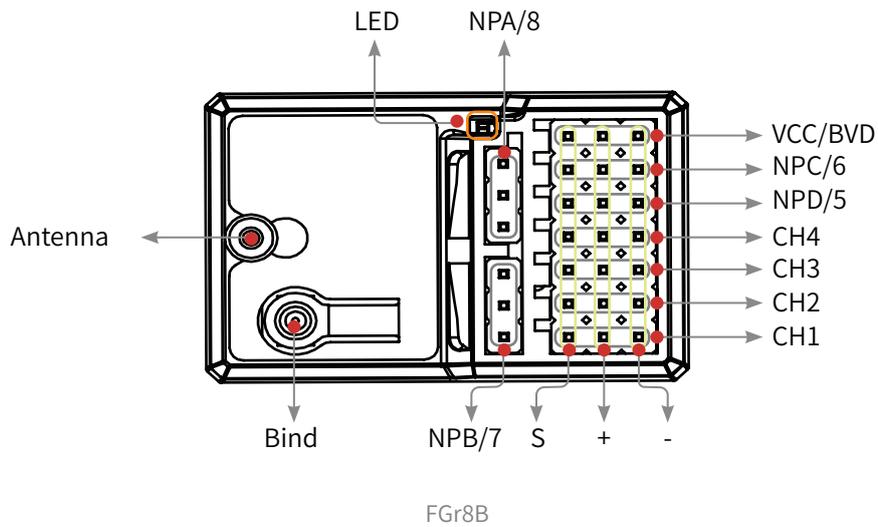
FGr4B

For best signal quality，it is recommended to keep the receiver antenna up and away from metal when installing the FGr8B or FGr4B receivers.

2.3.1 Status Indicator

The status indicator is used to indicate the power and working status of the receiver.

- Off: The power is not connected.
- Lit in red: The receiver is on and working.
- Flashing quickly: The receiver is binding.
- Flashing slowly: The bound transmitter is off or signal is lost.
- Three flashes and one off: The receiver is in firmware upgrade state.

3. Getting Started

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

3.1 Transmitter Battery Installation

⚠ Danger	• Only use included 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.

The Noble Pro has 2 batteries, one located in the handle and one in the removeable base.

To attach the base:
1. Line up the base so that the transmitter handle has a slight over hang on the back.
2. Carefully insert the base contacts into the hole in the bottom of the handle.
3. Hold the handle firmly and pull the battery backwards. When it is secure you should hear a click.

Steps to disassemble the base:

② Push the base forward

③ Remove the base

① Push the base upward
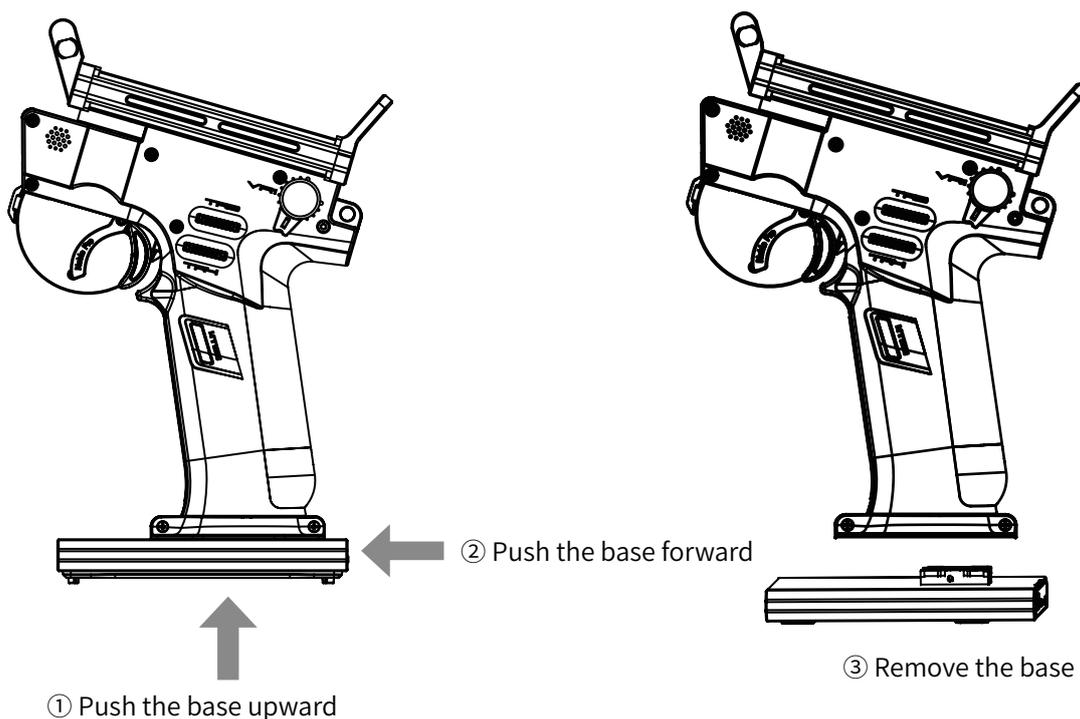
4. Operation Instructions

> 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. Make sure that：
    - The battery is fully charged and installed correctly.
    - The receiver is installed correctly and powered on.
2. Hold the power button until the screen turns on.
3. Connect the power supply to the receiver.

⚠ Note	• Operate with caution in order to avoid damage or injury.
⚠ Note	• Make sure that the throttle is at its lowest position and the switches are set to their up position.

4.2 Binding

The transmitter and receiver have been pre-bound before delivery.

If you are using another transmitter or receiver, follow the steps below to bind the transmitter and receiver:

1. Press the Bind button on the receiver for seconds, and then connect the power cord to any interface on the receiver. At this time, the receiver will flash quickly.

- Please make sure your transmitter is not connected to other receivers before binding.

2. Turn on the transmitter, click the ⚙ icon and enter [RX SET], and select [Bind Set] on the menu.
3. Click [Enhanced RX]. Under the [Start Channel] menu, click the corresponding right channel as needed, and click to return to the previous interface.

4. Click [Start Bind]:

AFHDS3 two-way: If binding is successful the status indicator will remain solid and the transmitter will exit bind mode automatically.

AFHDS3 one-way: If binding is successful the status indicator will flash slowly, however bind mode on the transmitter must be exited manually by touching the back icon.

5. Once binding is complete, remove the power and bind cable from the receiver.

6. Check to make sure everything functions as expected. If not repeat the steps above.

- **This binding procedure only applies to the Noble Pro transmitter and FGr8B/FGr4B receivers. Different receivers have different binding procedures. Please refer to our official website for more information and relevant user manuals.**

4.3 Transmitter LED Indicator

This LED has five colors, red, green, blue, yellow, white and off which can be set according to user preference. You can also check the battery indicator.The transmitter LED can also be used as a power indicator.

To change the LED color see the LED Strip section of this user manual.

4.4 Power Off

Follow the steps below to turn off the system:

1. Disconnect the receiver power.
2. Hold the transmitters power button until the screen turns off.

⚠ 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 Interface

The main interface mainly displays information related to the model, such as transmitter voltage information, function status and so on.

The display on the main interface can be customized as required, including the states and data of the main interface. Up to 8 states and data can be displayed.

Main interface left slide: Channel display; right slide: Failsafe; upward slide: Timer; downward slide: System settings. If you need to change settings, click [8.7 Main Interface Shortcut].

Model Name

Transmitter battery level

Receiver battery level

Sensors

Function Status Bar

Display custom of main interface

Setup:
Click the custom screen location on the main interface. Click the display option on the main interface. In the menu, select the corresponding function as needed.
The state of the function or channel will be displayed in the main interface after selection.

Trigger Trim

Steering Trim

Hold the lock icon for 2 seconds to lock or unlock the screen.

Menu Icon

Function Status Bar

The function status bar displays the status of various functions. If the function is a darker color then it is active, if it is slightly see through then it is inactive.

TH Curve   ENG Cut   Boat   MIXES   Sound

A.B.S.   TH Idle Up   CRUISE   Timers
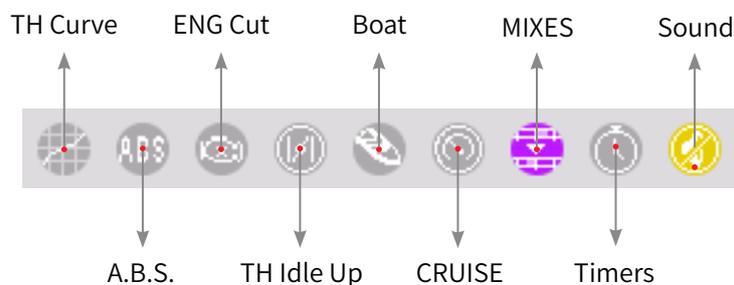
Function is not active, touch this icon, or assign activation to a switch to activate the function.

Function is active, touch this icon or assign activation to a swith to turn the function off.

Noble

6. Function Settings

This section details functions and their use.

6.1 REV

The Reverse function is used to correct a servo or motor's direction in relation to the systems controls. For example, if a steering servo is mounted upside down in order to fit inside a model, when the system's steering wheel is turned, the servo will move in the opposite direction. To fix this, all we need to do is reverse CH1.

Use:

1. Touch the box next to the channels name. If the channel is in normal mode the box will display "NOR", if it is reversed it will display "REV".
2. Test to make sure everything is working as expected.

6.2 EPA

Endpoints are the limits of the channels range of movement. There are two endpoints, a low endpoint and a high end point.

Setup：

1. Touch a low or high endpoint box on a channel or move the control to the diection you wish to limit. The selected endpoint will be highlighted in green.
2. Use the + and - keys to change the end point position. The maximum is 120% and minimum is 0%.
3. Test to make sure everything is working as expected.
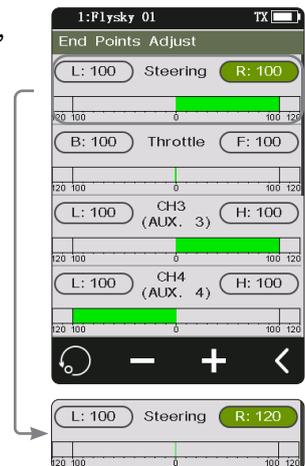
6.3 SUB TR

SUB TR (subtirm function) can be used to adjust the error of the structure by changing the channel neutral position.
For example, if a car's wheels are slightly out of aline-ment, even when the transmitter wheel is not being touched, subtrim can be used to correct the alignment.

Setup：

1. Touch the box next to the channel name to select it. When selected the box will be highlighted in green.
2. Use the + and - keys to change subtrim position.
3. Test to make sure everything is working as expected.
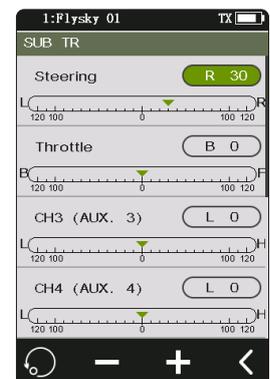
6.4 ST DR/EXP

This function changes the steering channel's response curve. There are 2 main parameters:

[Rate]: Changes the outer limits of the steering, the default and maximum is 100%.
[Exp]: Changes the steering curve, which changes the response of the steering wheel. The Exp. setting can be positive or negative.

Setup:

1. Eenter this menu then touch the ⬛ icon to enable this function. When this function is enabled, the icon will change to ✅ .

2. Touch [rate] or [EXP](When an option is selected it will be highlighted).

3. Use the + and - icons to raise or lower the percentage as needed.

4. Repeat for the other setting as needed.

5. Test to make sure everything is working as expected.
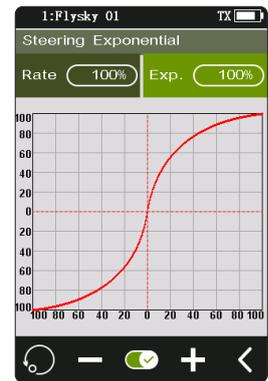
6.5 TH DR/EXP

This function changes the throttle channel's response curve. There are 2 main parameters:

[Rate F] and [Rate.B]: Reducing the rate shrinks the outer limits of the curve. As the rate drops below 100%, the graph will update in real-time. The maximum is 100%.

[Exp.F] and [Exp.B]: Changes the steering curve, which changes the response of the throttle. The Exp. setting can be positive or negative.

Changes to the rate and exponential can be seen on the graph located in the center of the screen. The system also gives a real-time readout of the channel's current position.

Setup:

1. Touch [rate.F], [rate.B], or [Exp.F],[Exp.B].

2. Use the + and - icons to raise or lower the percentage as needed.

3. Repeat for the other setting as needed.

4. Test to make sure everything is working as expected.
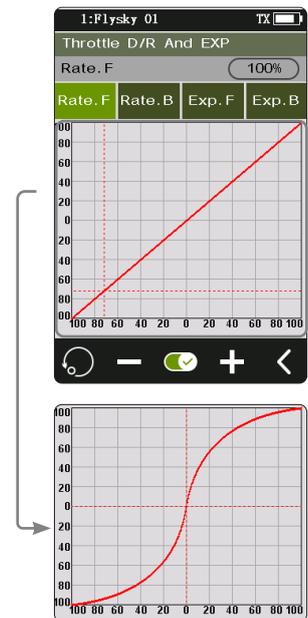
6.6 Timer

This function can set with a variety of timers, to generally calculate the total model run time, competition specific time spent, or transmitter run time, etc.

The timer function can be activated in three modes:

Mode 1:
1.Click the [Timer Mode: Up Timer] icon. Click the right side of the corresponding function as needed. Click to return to the previous level interface.
2.Click [Start] to start the timer. Click [Stop] to stop the timer. Click [Reset] to reset the single timer function to its default value.

Mode 2:
1.Click the [Throttle Start Timer] icon. Click "+" or "-" to change the throttle start value. Press the "+" or "-" icon for seconds to accelerate the throttle start value. The value change level is 1, and the level range is -100 to 100. Users can adjust it as desired.
2.Click the ⬛ icon to activate this function. The interface shows "Throttle start timer open". That indicates successful activation.
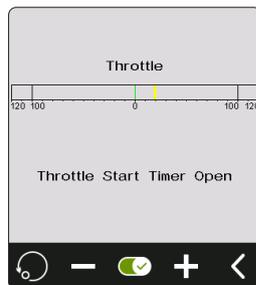
3.Verify that the settings are normal as expected. When the throttle is adjusted to the set value, the timer will start timing.

Mode 3: The timer can be enabled or disabled quickly through the key assignment function.

The system will send out a prompt once per recorded time.

The race timer has 3 modes:

[Up timer]: Counts up.

[Down Then UP Timer]: Counts down from the set time.There are intermittent voice prompts for the countdown which starts from 0.

[Lap Timer]: Keeps track time for each individual lap.Once triggered the on icon will become the lap icon. Each time the lap icon is pressed the last lap will be recorded in the lap timer list. The maximum number of laps is 99 and the minimum lap time must be over 3 seconds.

Lap Memory: Records the results from the lap timer.
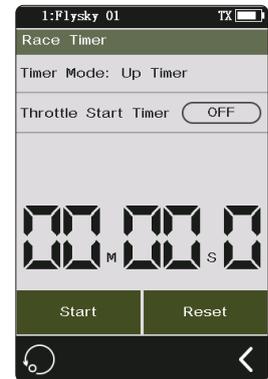
6.7 ASSIGN

This function assigns the system's physical buttons to different functions for quick control.

A key/ switch or knob can be assigned to control multiple functions or auxiliary channels at the same time.

The six keys or knobs (TR1-FB, TR1-LR, TR2-FB, TR2-LR, TR3, and TR4) have the same function and can be used to quickly adjust the values of CH3 to CH18 and multiple functions, with assigning 2-position or 3-position switches. When the TR control is one-way, the assigned function and channel can be quickly enabled, disabled, or switched.

Note: the number of channels controlled is subject to the [Channel Number Definition].

[Type]: Used for Normal and 2nd/3rd gear switch adjustment.

[Function] and [Function2]: Assign functions to this key or knob.

[Direction]: Used for the forward or reverse of this button or knob.

[Mode]: When "Trigger" is selected, channel data will change once through key triggering. Channel data will return to the state before key operation when the key is released. When "TURN" is selected, channel data remains in effect at the time of trigger if the button is rebounded.

[Step]: Step, which is used to adjust the value change of a single operation. "1" means move the key once, the value change level is 1, the level range is 1-120, the user can adjust it as needed.

Setup:

1.Touch [TR1-FB] or any of the other button icons.

[Button Type S DIR]： means the key or knob can control enabling, disabling, or switching from one direction separately.

[Button Type 2 DIR]： means the key or knob can adjust the function or channel values in two directions (upward and downward).

2.Click [Type], switch between [Normal], [2 POS], and [3 POS] as required, and click ◁ to return to the previous interface.

3.Touch [Function] and [Function2] to enter the next menu, Touch the icon next to function name。

A key or switch can be assigned two functions or channels. When [Type] is set to [2 POS] or [3 POS], the function cannot be assigned.

4.Click the [NOR] option to the right of [TR1-FB], and the display of [Reverse] indicates that the actual operation of this button is reversed with the output.

5. Click [Step], move the cursor to this item, click "+" or "-" to change the value. If "2" is displayed, it means to move the button once, the value change level is 2, when [Type] selects [2 POS] or [3 POS], the step value is not adjustable. When [Type] selects [3 POS], Used for the trigger and turn of this button.

Switching to sigle direction:

1. Click [TR1-FB] or other key icon to enter the submenu; then click [Button Type 2 DIR]. The system will prompt "Switch button type may cause current key setting to be lost, confirm and switch?", click [Yes] to switch [S DIR].

2.Click [TR1-F] or [TR1-B] to display the function setting interface.

3.Click the [Function] or [Function2] icon. Click the right side of the corresponding function. Click to return to the previous level interface.

4.Click the [NOR] option on the right side of [Direction]. Then, [REV] is displayed. It indicates the actual operation of this button is reversed with the output.

5.Click the [Trigger] option on the right side of [Mode]. Then, [TURN] is displayed. It indicates that channel data is changed once for each trigger of this button, and the data is kept in the state of the trigger is effective.

Knob VR1-L

Type	Normal
Function: NONE	
Function2: NONE	
Direction	NOR
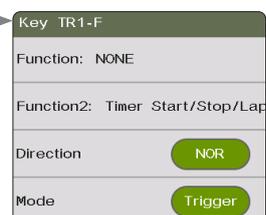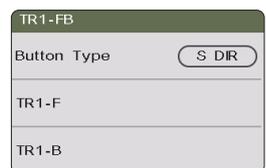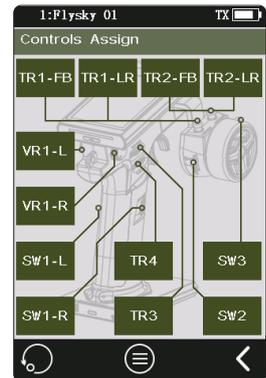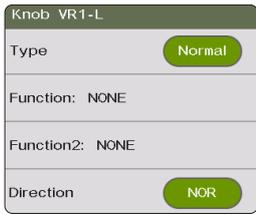
The functions of VR1-L and VR1-R are the same as above. However, the step is not adjustable.

The keys of SW1L, SW1R, SW2 and SW3 can be used to control the enabling, disabling, or switching of channel 3 to channel 18, as well as multiple functions. The combination of SW2 and SW3 are used to adjust the values of the selected channels and functions.

Key SW2
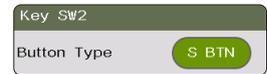
Button Type	S BTN

Note: The number of channels controlled is subject to the [Channel Number Definition]. The default key type of the system is [Single Button]. Click the [Single button] icon on the right side of [Button Type] to switch to the combination key.

Trim SW2+SW3

| Button Type	C BTN
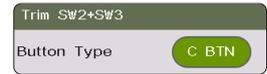
The operation procedure of this function is basically the same as the TR1-FB key setting.

Keys Assign

TR1-FB	Steering Trim
	NONE
TR1-LR	NONE
	NONE
TR2-FB	Throttle Trim
	NONE
TR2-LR	NONE
	NONE
TR3	NONE
	NONE

VR1-R · SW1-L · TR4 · SW3 · SW1-R · TR3 · SW2
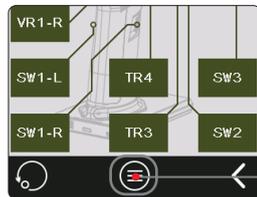
Function Assignment Icon

Click the icon to enter the [Keys Assign]. In this list, you can view detailed information about the function assignment of all keys and knobs. You can directly click the corresponding button function to set the function.

List of assignable functions (including but not limited to the following functions):

2 DIR (TR1/TR2/TR3/TR4) **Knob** (VR1-L/VR1-2) **C BTN** (SW2+SW3)						**S BTN** (SW1-L/SW1-R/SW2/SW3) **S DIR** (TR1-FB/TR1-LR/TR2-FB/TR2-LR)			
1	Steering Trim	27	A.B.S Cycle Length	53	Mix 4 Low Side	1	Timer Start/Stop/Lap	27	Mix 6
2	Throttle Trim	28	A.B.S Trigger Point	54	Mix 4 Hign Side	2	Timer Reset	28	Mix 7
3	Steering Subtrim	29	A.B.S Duty Cycle	55	Mix 4 Offset	3	Steering D/R And EXP	29	Mix 8
4	Throttle Sbutrim	30	Brake 1 D/R	56	Mix 5 Low Side	4	Throttle D/R And EXP	30	SVC (connect with enhanced RX)
5	Steering D/R	31	Brake 1 EXP	57	Mix 5 Hign Side	5	Throttle Curve		....
6	Throttle D/R	32	Brake 1 ABS Return	58	Mix 5 Offset	6	Throttle Idle Up		
7	Brake D/R	33	Brake 1 ABS Delay	59	Mix 6 Low Side	7	Engine Cut		
8	Steering EXP	34	Brake 1 ABS Cycle	60	Mix 6 Hign Side	8	Cruise Control		
9	Throttle EXP	35	Brake 1 ABS Trigger	61	Mix 6 Offset	9	A.B.S		
10	Brake EXP	36	Brake1 ABS Duty Cycle	62	Mix 7 Low Side	10	Smart Vehicle Control		
11	Throttle Idle Up	37	Brake 2 D/R	63	Mix 7 Hign Side	11	4WS Mixing Mode		
12	Cruise Control (without VR knob)	38	Brake 2 EXP	64	Mix 7 Offset	12	4WS Mixing Rear		
13	4WS Mixing Rate	39	Brake2 ABS Return	65	Mix 8 Low Side	13	4WS Mixing Same		
14	Drive Mix Rate	40	Brake 2 ABS Delay	66	Mix 8 Hign Side	14	4WS Mixing Rev.		
15	Track Mix Front	41	Brake 2 ABS Cycle	67	Mix 8 Offset	15	Drive Mix Mode		
16	Track Mix Back	42	Brake 2 ABS Trigger	68	....	16	Drive Mix F-R Drive		
17	Track Mix Left	43	Brake 2 ABS Duty Cycle			17	Drive Mix F Drive		
18	Track Mix Right	44	Mix 1 Low Side			18	Brake 1 Exponential		
19	Steering Speed Turn	45	Mix 1 Hign Side			19	Brake 1 A.B.S.		
20	Steering Speed Ret.	46	Mix 1 Offset			20	Brake 2 Exponential		
21	Throttle Speed Go	47	Mix 2 Low Side			21	Brake 2 A.B.S.		
22	Throttle Speed Ret.	48	Mix 2 High Side			22	Mix 1		
23	Brake Speed Go	49	Mix 2 Offset			23	Mix 2		
24	Brake Speed Ret.	50	Mix 3 Low Side			24	Mix 3		
25	A.B.S Brake Return	51	Mix 3 Hign Side			25	Mix 4		
26	A.B.S Delay	52	Mix 3 Offset			26	Mix 5		

6.8 AUX

Noble Pro has two fixed channels. Channel 1 outputs steering and channel 2 outputs throttle. If you need to increase the fixed channel, you can use this function.

Channel name pre-selection:

1. Click [CH5] or other channels to enter the interface to set the channel name.

2. Click the ⬛ icon and click the right side ⦿ of the corresponding channel as needed. Click ‹ to return to the previous level interface.

- The channel will be occupied after selection.

To set the channel name:

3. Click the [Name] option to set the desired channel name. Press [Enter] for confirmation. Click to return to the previous level interface.

A name can be set to any combination of letters, numbers or symbols.

Auxiliary channels can be pre-selected with the names and states of channel 3 to channel 18. The channel pre-selected function and the corresponding state can be viewed on the main interface. See the following table.

Channel Name		Channel Status	
Chinese	English	Chinese	English
方向	Steering	Diaplays the progress bar of the corresponding channel	
油门	Throttle		
前桥差速	F Diff	开启 / 锁定	Open/Lock
中央差速	C Diff	开启 / 锁定	Open/Lock
后桥差速	R Diff	开启 / 锁定	Open/Lock
换挡	Shift	高 / 中 / 底	High/Mid/Low
高低速	Gearbox	高速 / 中速 / 低速	High/Mid/Low
分动箱	T Case	前驱 / 四驱 / 后驱	FWD/4WD/RWD
断传	Dig	断开 / 四驱	Off/4WD
灯光	Lights	开 / 关	On/Off
远光灯	H Beam	开 / 关	On/Off
近光灯	L Beam	开 / 关	On/Off
雾灯	F Light	开 / 关	On/Off
顶灯	T Light	开 / 关	On/Off
拉烟	Smoke	开 / 关	On/Off
鸣笛	Whistle	开 / 关	On/Off
绞盘	Winch	收 / 停 / 放	Go/Stop/Back
底盘升降	Ecas	升 / 降	Up/Down
引擎	Engine	启动 / 熄火	On/Off
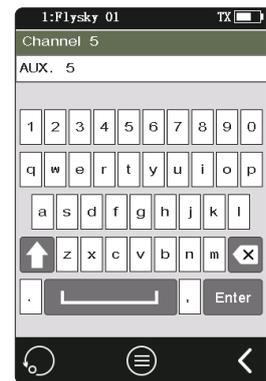
Note on auxiliary channel menu and displayed states:

[S DIR/2 DIR]: when single direction is selected, channel function can be enabled or disabled through the key or knob. When two-way is selected, the channel value can be adjusted.

[Single key/Combination key]: the channel function can be enabled or disabled by using one switch. Two switches can be used to adjust the channel value.

[Type]: Used for 2-position/3-position switch adjustment.

[Function] or [Function 2]: assign the channel to this key or knob.

[Direction]: used for forward or reverse direction of this key or knob.

[Mode]: used for the trigger or flip of the key.

[Step]: used for adjusting the change amount of the value for a single operation. The value change level is 1. The level range is 1-120. The value can be adjusted as required.

Noble Pro's keys or knobs can be used to control the enabling, disabling, or switching of channel 3 to channel 18, as well as multiple functions. The 2-position or 3-position switch can be assigned. Alternatively, the value can be used for adjusting the speed.

Note: the number of channels controlled is subject to the [Channel Number Definition].

[2 DIR] Function settings:

1.Click [CH5] or other channels to enter the submenu. Click [Control: None] to enter the key setting interface.

2.Click [TR1-FB] or other key icons to enter the submenu. By default, the two-way is used in the system.

3. Click [Type] to switch between [Normal], [2-position], and [3-position].

4.Click [Function] or [Function 2] to enter the submenu. Click the right side ◉ of the corresponding function. Click ❰ to return to the previous level interface.

- By default, the channel is assigned to [Function] in the system. When [Function] is assigned with a function, the channel will be automatically assigned to [Function 2].

- When [Function] and [Function 2] are assigned with functions or channels, the system will send a prompt. For example, "This control has been assigned to Direction Trim. Are you sure you want to assign to CH6". After confirmation, this channel will replace the previous function or channel and be assigned to the first function menu.

- One switch can be assigned to control two functions or auxiliary channels at the same time.

5.Click the [NOR] option on the right side of [Direction]. [Reverse] is displayed. It indicates that this key actually operates in reverse to the output.

6.Click "+" or "-" to change the value. Press "+" or "-" icon for seconds to accelerate adjustment of the step value.

- When [Type] is set to [2-position] or [3-position], step value is not adjustable.
- When [Type] is set to [3-position], the trigger or flip of the key can be set.

7.Verify that the settings are normal as expected.
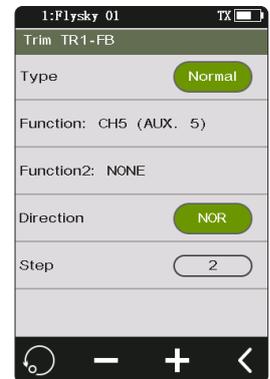
[S DIR]function setting:

1.Click [TR1-FB] or other key icons to enter the submenu. Click [Key Type-Two-way] to change the mode.

At this point, the system will prompt "Switching the key type will clear the current settings of the key. Are you sure you want to switch?".

2.Click [Yes] in the prompt box to set to one-way mode.

3.Click [TR1-F] or [TR1-B] to enter the function setting interface.

- By default, the channel is assigned to [Function] in the system. When [Function] is assigned with a function, the channel will be automatically assigned to [Function 2].

- When [Function] and [Function 2] are assigned with a function or channel, this channel will replace the previous function or channel, and assign to the second function menu.

- When [Function] and [Function 2] are assigned with a function or channel and the channel is changed from another switch to this key, this channel will replace the previous function or channel, and assign to the first function menu.

- If the key is replaced, the system will prompt "This channel has been assigned to TR1-F. Are you sure to assign to TR1-B."

4.Click the [NOR] option on the right side of [Direction]. [Reverse] is displayed. It indicates the actual operation of this key is reverse to the output.

5.Click the [Trigger] option on the right side of [Mode]. [TURN] is displayed. It indicates the channel data changes once for each trigger of this key. Data remains in the state when the trigger is effective. Click to ❰ return to the previous level interface.

SW2, SW3, SW1-L and SW1-R can be used to control the enabling, disabling, or switching of channel 3 to channel 18, as well as multiple functions.

1.Click [SW2] or other key icons to enter the function setting interface;

If you want to change the [Key Type], click [Single Key] on the right side to switch.VR1-L、The functions of VR1-L and VR1-R are the same as above, but the step is not adjustable.

Click the ⬡ icon to enter the [Keys Assign]. In this list, you can view detailed information about the function assignment of all keys and knobs. You can directly click the corresponding button function to set the function.
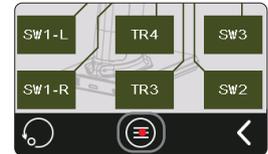
6.9 Model

The model functions are used to change, reset, rename, copy or customize the display and sorting of the main menu. The Noble Pro can store up to 20 models.

[Select Model]: To select a model touch "Select Model", then touch a model from the list.

[Name: FlySky 01]: After clicking, use the keyboard in the interface to type in a new name.

[Channel Number Definition]: this function is used to select the number of channels. If the larger number of channels is switched to the lower number of channels, the system will prompt "After switching you need re-binding, Are you sure?". Click "Yes". Switching is successful.

When the lower number of channels is switched to the larger number of channels, model data will not be reset. The system will prompt "The model will reset , need re-binding, Are you sure?". Click "Yes". Switching is successful.

After choosing [CH2 (Fast)], only two channels for steering and throttle are retained. This makes operations easier and channel delay experiences are richer. It is suitable for new players and players who like different throttle speed experiences.

[RF Setup]: it includes RF protocol setup and RF module update of the transmitter and receiver.

[AFHDS3 one-way]: it features lower latency, allowing one transmitter to connect multiple receivers. It is applied when the model does not need any return data.

[AFHDS3 two-way]: with the two-way return function, it can return feedback data from receivers and sensors and realize one transmitter to one receiver.

[Mini-Z(EVO)]: it is used with Kyosho FHSS receiver to control the cars of Kyosho miniZ EVO. The number of channels is fixed (two channels).

[Mini-Z(FHSS)]: it is used with a Kyosho FHSS receiver to control the cars of Kyosho miniZ FHSS. The number of channels is fixed (four channels).

FS-RM005 RF head supports a Noble Pro transmitter. It is only compatible with Kyosho Mini-Z (FHSS) cars.

Bind steps:

1. Remove the transmitter base's mobile power supply and insert the RF head into the transmitter base correctly (as shown in the figure on the right).

2. Click [MODEL]. Select the RF setting as Mini-Z (FHSS).

3. Insert it and re-install the transmitter base power supply.
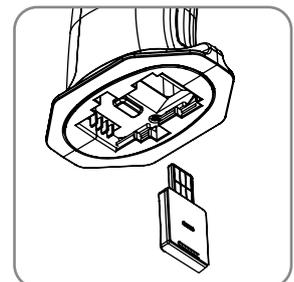
4. Connect the power cord to the transmitter. Press the receiver bind key while connecting the receiver power supply. At this time, the receiver LED indicator flashes quickly.

- Operation modes vary with receivers in case of their bind state.

5. Click [Receiver setup]. Select [Bind setup]. After the receiver flashes slowly, the transmitter will automatically exit the bind state. When the receiver indicator is on, it indicates the bind is successful.

6. Check whether the servo is working properly. If a bind is required again, repeat the above steps.

Change the RF protocol:

1. Click [RF standard] to enter the submenu. Click the right side of the corresponding function. Select "Yes" and click to return to the previous level interface after the prompt box pops up.

- If you switch to the RF standard, the model will be reset and a bind is required again.

[Update RF]:

The update RF function can be used to update the built-in RF module. After the firmware of the transmitter is updated, you need to update the RF when the system prompts that the RF fails or the bind of the receiver fails.

Click [Update RF], Click "Yes" after the prompt interface pops up. An update progress bar appears. Wait a few seconds. The update is completed. The transmitter will automatically exit the update interface. If the transmitter cannot enter the update RF status, there is no RF module or the RF module is faulty.

[Custom main menu]: You can customize the main menus sorting of and visibility of functions. Touch the small box, to select (show it in the menu) or deselect (hide from menu) If you need to adjust the menu order, select the menu you want to move (highlight is selected), then touch [Move up] and [Move down] to change its position in the menu.

[Model Reset] : To reset a model touch "Model reset", then select the model you wish to reset from the list. The system will ask if you are sure, select "yes".

[Copy Model]: Touch "Copy Model", then touch the model to copy from the list. Next select a target slot from the list, this will overwrite everything in that slot. The system will ask if you are sure, select yes.

[Import or Export Model] : You can import and export models by logging in to the FlySky official website to download the software (FlySky Assistant) and then operate it on the PC (No need go back to click the menu on the transmitter, you can operate it directly)!

6.10 Sensor

This list shows all sensors connected to the receiver, including sensor type, number and real-time data.This list can also be accessed quickly from the home screen.

[Display Sensors]：

This list shows all sensors connected to the receiver, including sensor type, number and real-time data. This list can also be accessed quickly from the home screen.

[Type] shows the sensor type.

[ID] display sensor's number.

- The number zero in the list by default is the TX Voltage sensor, however receiver, signal strength indication, RSSI, noise, signal to noise ratio can also take this slot.
- No. 1 is the return information of the sub-receiver.
- No. 2 is the first external sensor connected to the receive, the receiver supports up to 14 sensors.

This list data is displayed in real time. When the receiver is connected to a sensor, this list will be refreshed to display the new sensor's data.

[Value] displays the data returned by a sensor.

1:Flysky 01	RX	TX
Sensor		
Display Sensors		
Choose Sensors		
Speed And Distance		

Type	ID	Value
TX Voltage	0	3.82V
RX Voltage	0	5.09V
Signal Strength	0	100
RSSI	0	-58dBm
SNR	0	46dB
Noise	0	-103dBm
Temperature	2	28.0°C
Motor Speed	3	0rpm
Motor Speed	4	0rpm
Ext Voltage	5	-0.01V
Air Pressure	6	998.3hPa
Altitude	6	125m

FS-CPD01　　FS-CVT01　　FS-CTM01　　FS-CPD02　　FGr8B

FS-CPD01　　FS-CVT01　　FS-CTM01　　FS-CPD02　　FGr4B

Note:

If using the Classic receivers you must select the [RX Interface] in the [RX SET] menu and select "i-BUS", save and exit, then connect the sensor to the receiver's i-bus port. All other steps remain the same.
2.If you use an enhanced receiver, you need to set the New Port interface to ibus-in.

Temperature Sensor（FS-CTM01）

Used to monitor the temperature of various components. Warnings can be set.

1.Connect the FS-CTM01 to the receiver or other sensors using the same method as used with other sensors.

2.Use a spongy double-sided tape to stick the temperature probe to the part you wish to monitor (such as: motor, battery).

3.Turn on the transmitter, enter [Sensor], then [Display Sensors] and rotate the wheel. If the "Type" column displays "Temperature" and the [Value] column displays a temperature then the installation was successful, otherwise repeat the above steps.

Voltage sensor (FS-CVT01)

It is used to monitor the model's battery voltage. The battery voltage can be monitored through from the transmitter. Warnings can be set.

1. Connect FS-CPD02 following the same steps as above.

2. Insert the red and black wire pins into the plug of the battery used for testing. The red wire is the positive pole and the black wire is the negative pole. When the voltage displayed on the transmitter sensor display interface is positive, the installation is successful.

3. Turn on the transmitter, enter [Sensor] , then [Display Sensors] menu and rotate the wheel. If the "Type" column displays "External Voltage" and the [Value] column displays a voltage then the installation was successful, otherwise repeat the above steps.

Speed sensor (FS-CPD01, FS-CPD02)

The speed sensor is applied to test the speed of the motor.

- "Motor speed" indicates that the sensor is testing the motor speed; "0rpm" is the speed measurement value.

Magnetic induction speed sensor (FS-CPD01)

1. Connect the FS-CPD01 sensor to the SENS interface of the receiver or the IN interface of the previous sensor.

2. Place the sensor next to the magnet, which is fixed at the position of the axial rotation to be tested (e.g. inside the wheel hub of the model car).

3. Place the sensor within 2 mm of the magnet, with the south or north pole of the magnet parallel to the sensor.

Turn on the transmitter, and select [Sensor] - [Sensor List]. Turn the gear. When the [Type] column shows "RPM" and the RPM value (0rpm) in the [Value] column changes. It indicates that installation is successful. Otherwise, repeat the above steps.

Light induction speed sensor (FS-CPD02)

1. Connect the FS-CPD02 to the relevant device, with the same connection method as above.

2. Fix the sensor and the reflective sticker at the position of the axial rotation to be tested. Keep the sticker flat and perpendicular to the sensor probe. Keep a moderate distance between the sensor probe and the sticker.

3. Turn on the transmitter, and select [Sensor] - [Sensor List]. Turn the gear. When the [Type] column shows "RPM" and the RPM value (0rpm) in the [Value] column changes. It indicates that installation is successful. Otherwise, repeat the above steps.

[Choose Sensor]:

This function allows you to select the sensor to be displayed on the main screen and high and low alarm values for that sensor.

There are four settings under this function: [Transmitter Voltage], [Receiver Voltage], [Signal Strength] and [RSSI], for setting high and low alarm values of the corresponding sensor.

For example , the Signal Strength Indication (RSSI). It refers to the distance between the transmitter and the model determined by received signal strength. A low signal strength indicates a weaker signal received by the receiver. This may cause the model to lose signals. A high signal strength indicates that the signal received is too strong, and this may interfere with the signals of the receiver and cause the model to lose control. Therefore, users can also choose to set the strong alarm alert.

Setup:

[TX voltage]:

1. Eenter this menu then touch the [icon] icon to enable this function. When this function is enabled, the icon will change to [icon] .

2. Touch [Low Alarm] to select. [Value] is the corresponding status alarm value. Touch the "+" or "-" icons to change the trigger value. Same with the [Hight Alaram] .

- [RX voltage], [Signal strength], [RSSI] can all be set using the above instructions.

Speed and distance:

This function is used to detect monitor wheel revolutions and distance traveled.

[Speed sensor]: Select the target sensor. If the sensor and receiver are connected the will appear in this menu automatically. You can choose between two speeds or [None].

[Set rotation length]: If a speed sensor is installed on the wheel, you need to define the radius the wheel. This length will be used to calculate the distance traveled. Click "+" or "-" to adjust the radius.

[Reset odometer 1]: Odometer 1 is used to record the distance traveled. The value of odometer 1 will be reset to zero each time the transmitter is power cycled.

[Reset odometer 2]: Odometer 2 is used to record the total driving distance regardless of transmitter power cycles, and as such is the cumulative distance from each session.
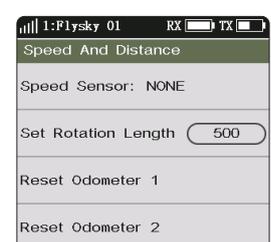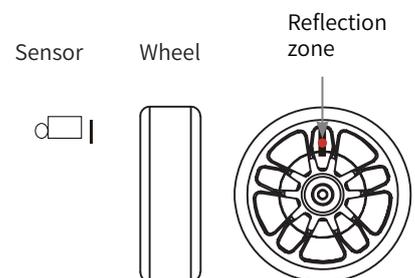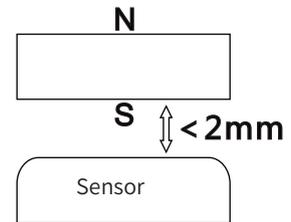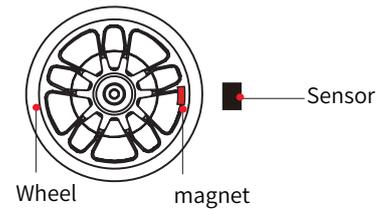
6.11 CH SPEED

This function allows you to set the steering speed, forward speed, brake speed and response speeds of CH3 to CH18.

Note: the number of channels controlled is subject to the [Channel Number Definition].

[Steering Speed]: changes the corresponding speed of the servo when the steering channel is outputting at fast speed. The minimum delay is 0.00s, and maximum delay is 10.00s. The adjustment step is 0.01s.

This function can be used for adjustment when the vehicle is operated with fast steering, which may cause the vehicle to lose control or when the vehicle structure cannot withstand a too fast steering speed.

[Front]: sets the response speed of the throttle channel.

This function can be used to imitate models with slow acceleration and deceleration response (for example, large trucks).

[Back]: used for vehicle models.

[Steering Speed], [Throttle] and [Brake] can be adjusted by assigning VR and TR type buttons or knobs under the [Button Setting] function. A window pops up to prompt real-time values in the adjustments by pressing buttons.

Back to center speed

Forward speed
Turning speed
Start speed
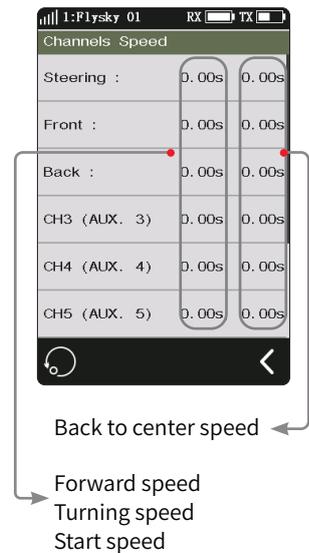
Channel speed - Steering

Function setting:

[Turn speed]: slows down channel output speed when the steering wheel is moving from the neutral position to maximum travel.

[Return speed]: slows down channel output speed when the steering wheel returns to the center position.

1. Click [Turn Speed] or [Return Speed]. This item is highlighted when selected.

2. Click the "+" or "-" icon to change response duration as needed. Press the "+" or "-" icon to accelerate the adjustment duration.

3. Verify that the settings are normal as expected.

Progress bar 1: shows the channel output speed after the delay (as shown on the right).

Progress bar 2: shows the actual speed before the delay takes effect (as shown on the right).

Progress bar 1

Progress bar 2

Channel speed-back/brack
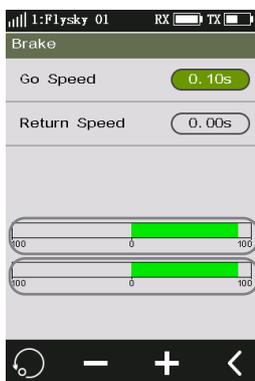
This function is only applicable to normal mode. This function is not displayed in ship mode.

Function setting:

[Go Speed]: sets the speed of the throttle brake.

[Return speed]: sets the speed at which the throttle brake returns to the center position.

1. Click [Go Speed] or [Return Speed]. This item is highlighted when selected.

2. Click the "+" or "-" icon to change the response duration as needed. Press the "+" or "-" icon to accelerate adjustment duration.

3. Verify that settings are normal as expected.

Progress bar 1: shows the channel output speed after the delay (as shown on the left).
Progress bar 2: shows the actual speed before the delay takes effect (as shown on the left).

Channel speed - Front/Throttle

This function is used to set the delay of the throttle start and return-to-center.

[Start]: sets the speed of throttle acceleration.

[Return to center]: sets the speed at which the throttle returns to the center position.

[Point P1]: means the division point between the first forward travel and the second forward travel. The default point is 30%, and adjustable range is 0-99%.

[Point P2]: means the division point between the second forward travel and the third forward travel. The default point is 60%, and the adjustable range is 1-100%.

[L]: the first travel.

[M]: the second travel. It can be set under the menu of mode 2 and mode 3.

[H]: the third travel. It can be set under the menu of mode 3.

Setup:

1. Click the icon on the right side of [Mode]. Click the "+" or "-" icon to switch to the desired mode.

2. Click the option that needs to be set. This item is highlighted when selected.

3. Click the "+" or "-" icon to change the response time or the percentage of the corresponding point as required. Press the "+" or "-" icon to accelerate adjustment of the corresponding value.

The percentage of point P1 differs from the percentage of point P2 by at least 1%.

The lower the percentage, the slower the throttle channel responding to the throttle trigger operation.

4. Verify the settings are normal as expected.
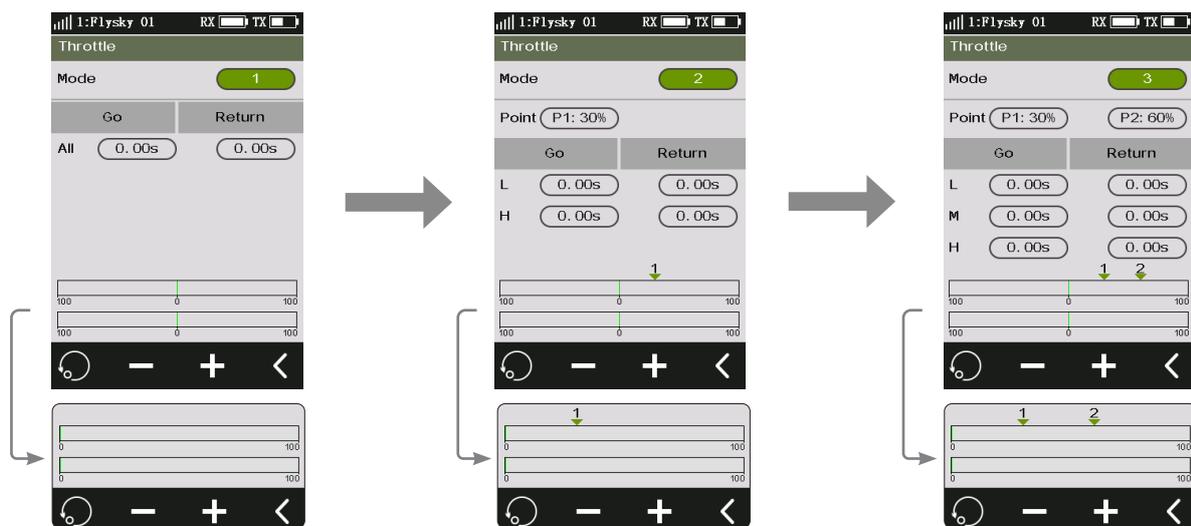
Channel Speed - CH3-CH18

This function is used to set the delay time of CH3-CH18 forward and return-to-center.
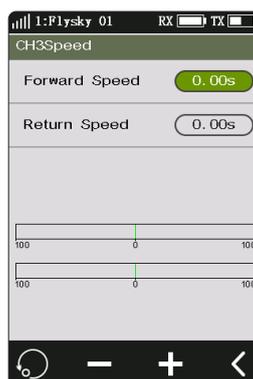
6.12 MIXES

This function allows you to set 5 mixing functions, that is, [4WS Mixing], [Track Mixing], [Drive Mixing], [Brake Mixing], and [Programming Mixes].

4WS Mixing

Used to set the wheels that control steering of the vehicle, front, rear or all four wheels.

This function is applicable to crawler with steering on both front and rear wheels.

By default, the front wheel steering is used in this function.

[Mixing ratio]: sets the amount of mixing from the steering channel mixing to the mixed channel. The adjustment range is 0-100%.

Setup:

1. Click [Ch3] on the right side of [Mixing Channel]. Click the right side ◉ on the corresponding channel. After selection, the channel will be occupied. Click ◁ to return to the previous level interface.

• Each channel can only be assigned one mixing function. It is not allowed to conflict with other Func Assign channel. When the selected channel is assigned with other mixing functions, the system will give a pop-up window reminder.

2. Click the "+" or "-" icon to change the ratio as required. Press the "+" or "-" icon to accelerate the ratio adjustment.

You can select [4WS Mixing ratio] under [Key setting] function. Assign VR or TR key or knob for adjustment. A pop-up window will appear in the adjustment by pressing the key, prompting real-time value.

3. Select the steering type as required.

You can select [4WS steering mode switch] under [Key Setting] function, to assign SW key for switching and selection. A pop-up window will appear in the switching, prompting the current steering type. You can select [4WS steering back], [4WS steering front and back in the same direction] or [4WS steering front and back in reverse]. The function can be quickly enabled or disabled through the SW key.

4.Click the ⊗ icon to enable this function. After this function is enabled, the icon will change to ✓ .

5.Verify the settings are normal as expected.

- -
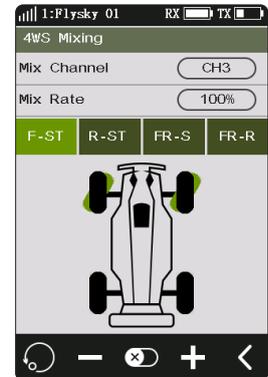
Track Mix

This function is applicable to models such as tracked vehicles and tanks, and allows one trigger or steering wheel to control the left and right tracks to move forward or steer differently at the same time.

This function allows you to set the ratio of forward, backward, left and right separately. The ratio adjustment range is 0-100% and the adjustment step is 1%.

The left progress bar shows the channel value of CH1 left track. The right progress bar shows the channel value of CH2 right track. The figure on the left indicates the state of operating the throttle forward separately.

Setup:

1. Select the check box on the right side of [Track Mixing] to enable this function. After the function is enabled, the icon will be changed to ☑ .

2. Click the ratio you want to set. The selected option is highlighted.

3. Click "+" or "-" icon to change the ratio as required. Press the "+" or "-" icon to accelerate ratio adjustment.

The ratio can be adjusted by selecting [Track Mixing Forward], [Track Mixing Backward], [Track Mixing Left] or [Track Mixing Right] in the [Key Setting] function, with assigning VR and TR keys or knobs for adjustment. A pop-up window will appear in the adjustment by pressing the key, prompting the real-time value.
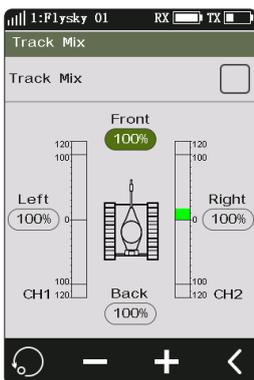
Drive Mix

Drive mix is used to set the way to control the vehicle engine drive, including three drive modes: rear drive, front and rear hybrid drive, and front drive. By default, rear drive is used.

Front drive has a shorter braking distance, which is suitable for emergency braking. In rear drive, the front wheels can focus on steering, which is more suitable for vehicle drift. The front and rear hybrid drive is to drive the vehicle by starting all four wheels together, which can provide more traction to improve power of the vehicle in acceleration, hill climbing, and other roads.

[Mixing ratio]: includes front ratio (F) and rear ratio (R) (100:100=F100%:R100%). The ratio is only used when front and rear drive are mixed. The adjustment range of both front and rear ratio is 0-100%, and the adjustment step is 1%.

Setup:

1. Click [Ch4] on the right side of [Mixing Channel]. Click the corresponding channel as required. This channel will be occupied after selection. Click ◁ to return to the previous level interface.

- Each channel can only be assigned one mixing function. It is not allowed to conflict with other Func Assign channel. When the selected channel is assigned with other mixing functions, the system will give a pop-up window reminder.

2. Click the "+" or "-" icon to change the ratio as required. Press the "+" or "-" icon to accelerate the ratio adjustment.

- When the mixing ratio is 100%:100%, the ratio of [R] decreases when you click "+", and the ratio of [F] decreases when you click "-".

- In any state, the percentage of [F] and [R] is kept at 100%.
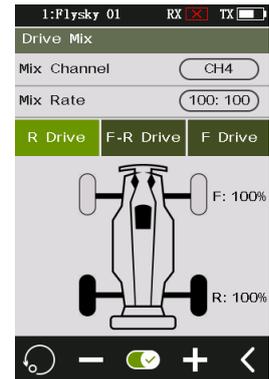
You can select [Drive Mixing Ratio] under [Key Setting] function and assign VR or TR key or knob for adjustment. A pop-up window will appear in the adjustment by pressing the key, prompting the real-time value.

3.Select the drive mode as needed. The figure on the right indicates the state of rear drive mode.

You can select [Drive Mixing Mode Switching] under [Key Setting] function, and assign SW keys for switching and selection. A pop-up window will appear in the switching, prompting the current drive mode. You can also select [Drive Mode Front and Rear Mixing] or [Drive Mixing Front]. The function can be quickly enabled or disabled by pressing SW keys.

4.Click ⬛ icon to enable this function. Verify that settings are normal as expected.

- -

Brake Mixing

This function has two sets of brake mixing controls, to use multiple servos to control brakes; for example, models using different servos to control the front and rear brakes.

If your model uses multiple channels to control the brakes together, you can use this function to control the brake channel as a mixer channel for the throttle channel.

Setup:

1. Click [Brake Mixing 1: Off] option to enter the submenu.

2. Click [CH3] on the right side of [Mixing Channel]. Click the corresponding channel on the right side as needed. This channel will be occupied after selection. Click ◁ to return to the previous level interface.

- Each channel can only be assigned one mixing function. It is not allowed to conflict with other Func Assign channel. When the selected channel is assigned with other mixing functions, the system will give a pop-up window reminder.

3.Perform the settings by following the steps of setting the [EXP] and [ABS] function.

4. Use the servo display function. Verify that the settings are normal as expected.

You can select the menu corresponding to brake mixing under the [Key Setting] function, assign VR, TR key or knob for adjustment. A pop-up window will appear in the adjustment by pressing the key, prompting the real-time value. Select [Brake Mixing 1 EXP Setting], [Brake Mixing 1 A.B.S.] or [Brake Mixing 2 EXP Setting], [Brake Mixing 2 A.B.S.] to assign SW keys to achieve two sets of brake mixing functions to enable/disable quickly.
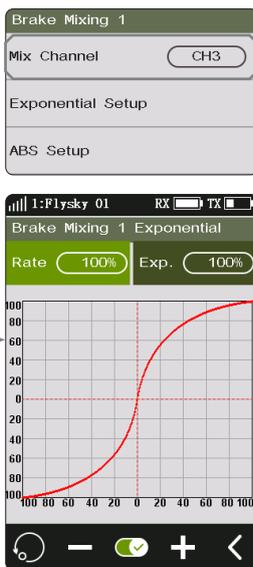
Programming Mixes

The Mixing function can be used to set the mix-control relationship between channels, containing a total of 8 groups of mixing relationships.

Setup:

1. Click [Mixing 1] or other mixing options as needed to enter the setting interface.

2.Click the icon to enable this function. When this function is enabled, the icon will change to .

3. Click [Primary Channel], select a primary channel from the list. The primary channel will affect the secondary channel.

4. Click [Secondary Channel] and select a secondary channel from the list.

5.Select [Low End Mixing] or [High End Mixing] as needed. Click the "+" or "-" icon to change the percentage to adjust the amount of low end or high end mixing. Click the icon to return to the menu when the setting is complete.

6.Click [Offset]. Then click the "+" or "-" icon to change the offset associated with the primary channel and the secondary channel.

7. Repeat the above operations to set other mixing controls.

Assign VR, TR keys or knobs in the [Key Setting] function to adjust 8 groups of programmed mixing controls of [Low End Mixing], [High End Mixing] and [Offset] ratios. A pop-up window will appear in the adjustment by pressing the key, prompting real-time value. In addition, it is possible to quickly enable or disable Mix 1 to Mix 8 functions by using the SW key.
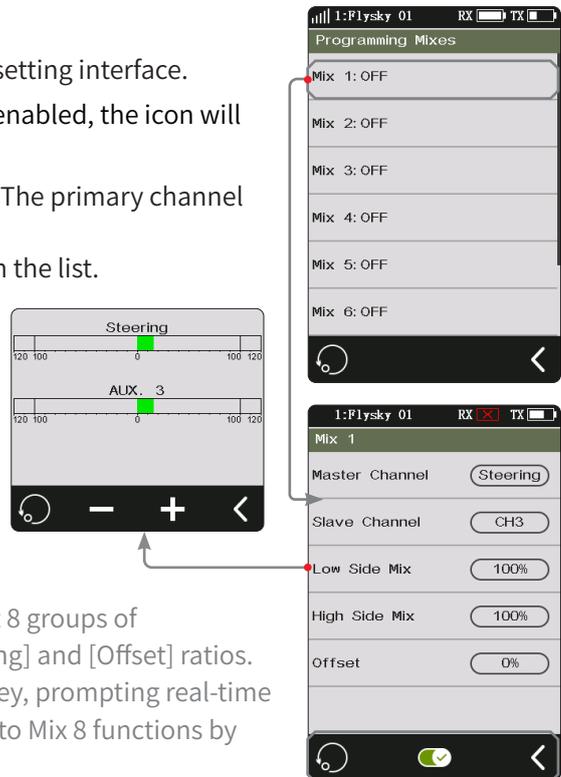
6.13 ABS

A.B.S. stands for auto breaking system. This function is used to stop the wheels from locking which can lead to loss of control or a skid. A.B.S. manages this by regulating the amount of pressure the breaks use, which is done by pumping the breaks on and off rather than a constant force.

There are six sub menus for A.B.S. function setting, [Brake Return], [Delay], [Cycle Length], [Trigger Point], [Duty Cycle], and [Steering Mix].

In the submenus, pulses are shown as a square wave, the peaks indicating brake on, and troughs in-dicating reduction in braking. As the value changes, the square wave will change to represent the function's current settings.

The trigger point is represented as a white line on the graph.

Below the graph is a bar that shows the real-time braking position. When this function is active and the brake is applied, the green bar will oscillate in real time showing the A.B.S. in action.

To activate this function press the icon. The icon will change to when active.
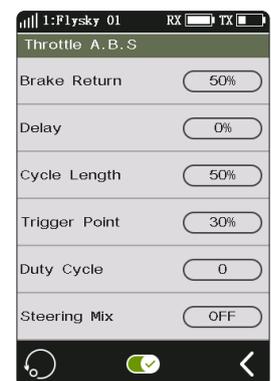
Break Return

Controls the reduction of braking during each pulse. Can be set to any value between 0% and 100%. By default it is set to 50%. If set to 60%, when the brakes are active; the system will remove 60% of the brakes strength on each pulse.
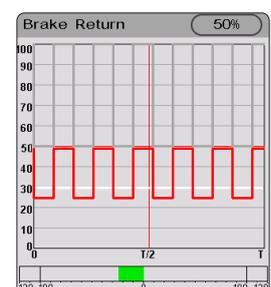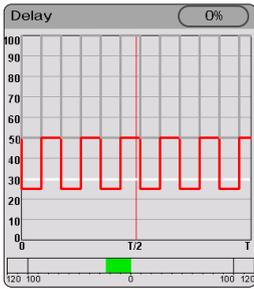
Delay

Determines how long it takes for the A.B.S. system to take effect. At a setting of 0%, the A.B.S. system will take effect as soon as the brake is applied. The higher the value, the longer it will take for the A.B.S. to function.

When set to 0% there will be no delay, meaning the breaks will be applied as soon as they are triggered. The maximum setting of 100% will result in a delay of 2 seconds.

Cycle Length

Increases or decreases the time between pulses. The higher the value, the longer the pulse.
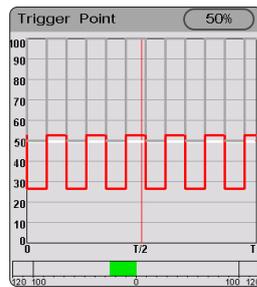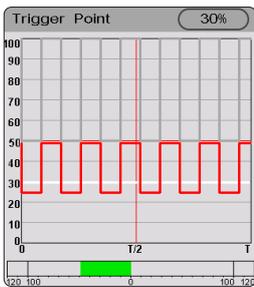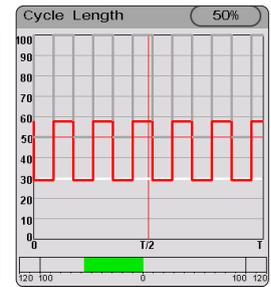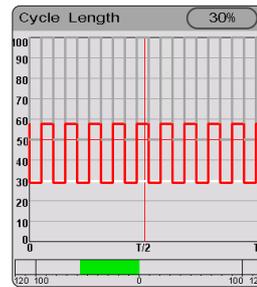
Trigger Point

Configures the point at which the A.B.S. starts to function. The higher the percentage, the further the trigger has to be moved to activate the A.B.S. 0%-100% represents the entire stroke of breaking servo.

Duty Cycle

Changes the length of each pulse and the gap between them. Adjustment range is from-4 to +4 cycles. As the value changes, the length of the braking waves peaks and troughs will change independently of each other and will no longer be symmetrical. Adjusting the brake to release ratio

When the period is set to "0", the ratio is 1: 1;

When the period is set to "1", the ratio is 1: 2;

When the period is set to "-1", the ratio is 2: 1.
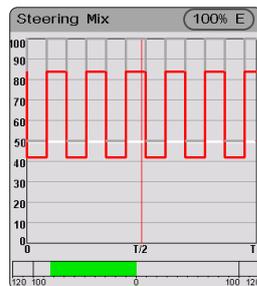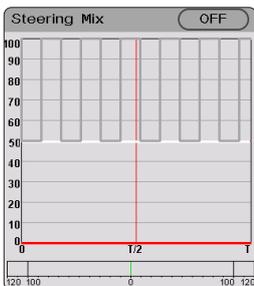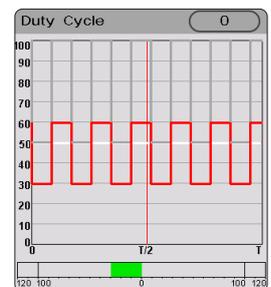
Steering Mix

A.B.S. can be reduced automatically while turning. This function mixes braking and steering to turn reduce the A.B.S. or replace it with a constant braking pressure.

The percentage represents the trigger position through its entire range of movement. E represents inside, N represents outside; if 50% N is set, the ABS function is active when within 50% (10% N-50% N), and outside 50% (50% N-100% N) is to turn off the ABS function;

If 50% E is set, the ABS function will be turned off within 50% (10% E-50% E), and the ABS function will be turned on outside 50% (50% E-100% E).

Setup:

1. Touch the enable function icon to enable this function.

2. Touch a setting to select it.

3. Touch the "+" or "-" icons to change the value.

4. Repeat as needed.

5. Test to make sure everything is working as expected.

6.14 Throttle Middle

The throttle middle function is used to set the neutral position of the throttle and brake to correct the problem of unequal throttle travel and brake travel of some models. If the neutral position is not set correctly, the model may start acceleration and driving directly after power-on.

Setup:

1. Click the "+" or "-" icons to change the percentage as needed.

2. Verify the settings are normal as expected.
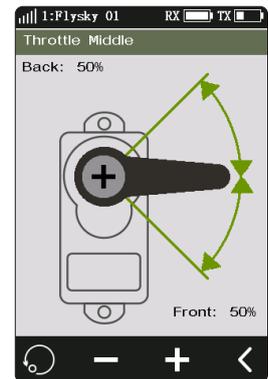
6.15 TH Neutral

Throttle Neutral creates a configurable dead zone for the throttle channel.

[Forward]: How far the dead zone extends into the throttle zone.

[Dead Zone]: The point at which the channel will kick in when the trigger passes the threshold.

[Backward]: How far the dead zone extends into the braking zone.

Setup：

1. Touch "Forward", "Dead Zone" or "Backward" to select it.
2. Use the + and - icons to to change the percentage as needed.
3. Repeat with other settings as needed.
4. Test to make sure everything works as expected.

6.16 TH Curve

This function changes the shape of the thottles response curve.

Setup:

1. Assigned a switch for throttle curve in the function of [ASSIGN];

2. Touch the 🔲 icon to enable the function. The icon will change to 🔘 when enabled.
3. Touch a point.

4. Use the + and - icons to raise or lower the points position as needed.

5. Repeat for the other points as needed.

6. Test to make sure everything is working as expected.

6.17 Idle Up

Throttle Idle Up is used for models that use a fuel based engine that will stall.

If left at 0 throttle. Idle up makes sure that the engine always has some throttle in order to keep it from stalling.

This function must be assigned to a switch/button in order to be activated .

This function will reset after shutting down. You need to restart this function after turning on again.

Setup:

1. Click the [x] icon to enable this function. When this function is enabled, the icon will change to [✓] .

2.The system jumps to the [Key Setting] function (please refer to [6.8 Key Setting] function to assign corresponding switch for this Func Assign).

3. Click the "+" or "-" icons to change the percentage as needed.
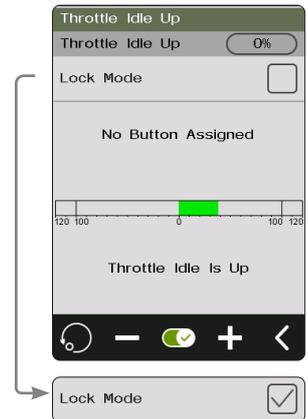
6.18 ENG CUT

When Engine Cut is triggered via a button it sets the throttle channel to a predefined position.
This function must be assigned to a switch/button in order to be activated.
This function will reset after shutting down. You need to restart this function after turning on again.

Setup:

1. Click the [x] icon to enable this function. When this function is enabled, the icon will change to [✓] .

2.The system jumps to the [Key Setting] function (please refer to [6.8 Key Setting] function to assign the corresponding switch for this Func Assign).

3. Click the "+" or "-" icons to change the percentage as needed.
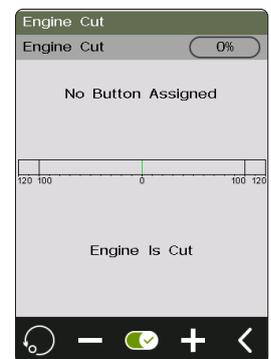
6.19 Cruise

When the cruise function is enabled, the throttle channel remains the channel value output as power-on.

When the vehicle travels at the desired speed, the cruise function can be enabled, and the vehicle will continue to travel at the same speed after it is enabled.

The function interface displays the percentage of throttle channel output value in real time.

When the function is enabled, the system exits the fixed speed cruise if the trigger is detecting the braking state. At the same time, a pop-up window will appear, indicating that "Cruise control off".

Setup:

1. Click the [x] icon to enable this function. When this function is enabled, the icon will change to [✓] .

2. The system jumps to the [ASSIGN] function, assign the switch for the cruise Func assign in the [Assign] function.

- Assign SW key (when TR1, TR2 key is in one-way mode, it can control the function to enable or disable) to enable/disable the cruise function quickly. A pop-up window will appear, indicating the current status.

- Assign TR key (when SW2 and SW3 are in the state of key combination, the value can be adjusted) to adjust the value of the fixed speed cruise. A pop-up window will appear in the adjustment by pressing the key, prompting real-time value.

3. Click the "+" or "-" icons to change the percentage as needed.

The percentage cannot be adjusted when cruise function is not enabled.
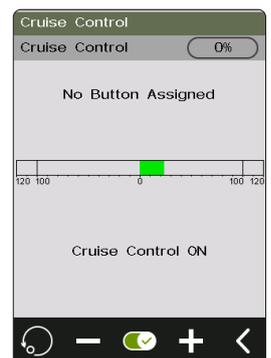
6.20 SVC

The receivers configured with this function are INR4-GYB (built-in gyroscope) and GMR (with gyroscope interface).

[Neutral Calibration]: used for gyroscope to calibrate steering and throttle neutral to make the best driving condition when the vehicle is driving normally.

- Before enabling the intelligent vehicle control function, you need to adjust the vehicle's steering servo volume, neutral trim and throttle neutral to the best driving condition. After completion, start the [Smart Vehicle Control] function for neutral calibration. Every time you change the trim or throttle curve, you need to calibrate the neutral position. The steering throttle should be placed in the neutral stationary state during the calibration process.

[Reverse]: You can set the positive and negative direction of the gyroscope in the mix-control of the direction channel.

[ESP Mode]: used for model assisted stability. Two modes are available: normal/lock.

Normal: when the vehicle is yawing or steering, the gyroscope automatically provides an opposite compensation to control the servo to keep it stable or prevent drifting according to the angular velocity generated.

Lock: if the steering wheel is return-to-center, the gyroscope will control the servo in the opposite direction according to the yaw angle when the vehicle is yawing, to make it go back to the expected direction (if the steering wheel is not return-to-center in the "Lock mode", it will be the same as the "Normal mode").

[Steering Gain]: is used to change the sensitivity of the mixing direction.

[Throttle Gain]: is used to change the mixing throttle sensitivity.

[Priority]: used to set the control ratio between steering wheel control and gyroscope in the steering, i.e., turning radius. In direction turning by using the steering wheel, the steering angle will be reduced due to the influence of gyroscope mixing. When the value is 0%, the mixing control is the strongest, that is, the turning radius is the largest. When the value is 100%, the mixing control is 0, that is, the turning radius is the smallest.

[Gyroscope calibration]: used for the first time to enable the gyroscope via binding or gyroscope calibration required after replacement.The model keeps a stable and stationary state. Click calibration. The receiver flashes twice and exits automatically. This indicates that the calibration is successful.

Setup:

1.Click the 🔘 icon to enable this fu,knction. When this function is enabled, the icon will change to ✅ .

- If the gyroscope is not connected, this function cannot be activated, and the system prompts "The current receiver is not properly connected to the gyroscope".

2.Click [Neutral calibration]. A pop-up box will appear "Are you sure you want to enter neutral calibration? Put the steering and throttle in the neutral stationary state before entering". Click "Yes". The transmitter enters the calibration state. The system prompts successful calibration with sound reminder.

3.If you want to change the direction of action, please click [Reverse]. If the function is set to reverse, it will show "Reverse";

- The method of replacing EPS is the same as above.

4.Under this function, you can also set the percentages of [Steering Gain], [Throttle Gain], and [Priority]. The adjustable percentages range is 0% to 100%. After selecting the option, click the "+" or "-" icon to change the percentage.

5.Slide to the bottom on the interface. Click [Gyroscope calibration]. A pop-up box will appear, indicating "Are you sure you want to start the calibration". The system prompts successful calibration with sound reminder.

When calibrating the gyroscope, please make sure the model is in a stable and stationary state.
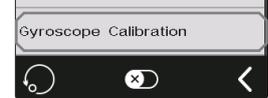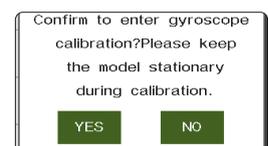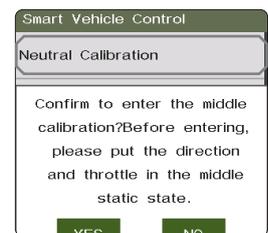
6.21 Boat

This function is used only when you are using a model boat. When this function is active, the throttle channel is set to its lowest position and the brake functionality is disabled.

To enable this function, select [No Brake Mode] to switch to boat mode. When switching is successful, [Normal Mode] is changed to [No Brake Mode]. The check box is selected.
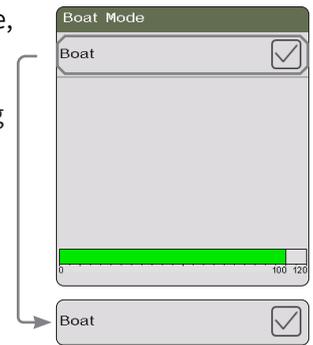
6.22 Display

This function displays the model's channel output and can be used to test output and servo range.

Press the icon ⊙ to start servo test mode, which will move all the channels slowly though their entire range of motion. Press the ⊗ icon to turn off servo test mode.

⚠ WARNING	• Make sure the model engine is powered off while the test function is activated.

Click the ☰ icon to enter the channel display interface. In this list, you can view the data progress bar of all channels and the percentage data of channels.
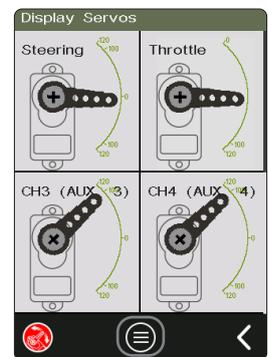
6.23 Beginner Mode

The beginner mode is suitable for entry level players to improve the safety of operations by limiting the amount of throttle servo.

This function is hidden by default. You need to enable it manually.

Setup:

1.Go to the [Custom Main Menu] menu under the [MODEL] menu bar, and select the [Beginner] check box. After selection, this function is displayed on the menu interface.

2.Find the function in the menu and click ⊡ icon to enable this function. When this function is enabled, the icon will change to ☑ 。
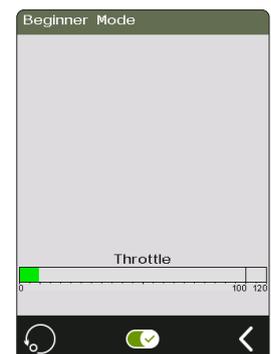
6.24 Help

This function provides the QR code of the product manual and the QR code of Skyfly promotion platform, including the official website, WeChat public account, and advertising site at www.flysky-cn.com. Users can obtain the QR code and scan it as required.

7 RX SET

7.1 Bind Set

This function is used to adjust the transmitter to the bind state so that it can bind with the receiver.

Noble Pro supports a dual-receiver mode.

The ex-factory bind settings of the transmitter and receiver are completed successfully.

If you need to re-bind, please follow the following steps for the bind between the transmitter and receiver.

Classic version (take FGr4P as an example):

Classic receiver mode is only applicable to adaptations between the transmitter and receivers such as FGr4, FGr4S, FGr4P, FTr4, FTr10 and FTr16S.

1. Insert the bind cable into the receiver's bind port,and plug the power cable into any other port. At this time, the receiver will flash quickly.
2. Turn on the transmitter.Click the ⚙ icon and enter the [RX SET], and select [Bind Set] in the menu.
3. Click [Classic receiver]. Click [Start bind]:
- When the RF standard selection is AFHDS3 two-way, the receiver indicator is on, indicating the bind is successful. The transmitter will automatically exit the bind interface.
- When the RF standard selection is AFHDS3 one-way, the receiver indicator flashes slowly. Click to exit the transmitter bind interface. After the exit, the receiver indicator is on, indicating the bind is successful.
4. The bind is successful. Take off the bind line and power cord from the receiver.
5. Reconnect the bind line and power cord to the receiver. Check whether the servo is working properly. If a bind is required again, repeat the above steps.

Enhanced version (take FGr8B as an example):

In the use of an enhanced receiver, if one receiver cannot meet the demand, you can use the dual-receiver mode.

1. Press the Bind button on the receiver for seconds, and then connect the power cord to any interface on the receiver. At this time, the receiver will flash quickly.
- Please make sure your transmitter is not connected to other receivers before binding.
2. Turn on the transmitter. Click the icon and enter the [RX SET], and select [Bind Set] in the menu.
3. Click [Enhanced Receiver]. The system prompts "After switching you need re-binding, Are you sure?". Click [Yes]
4. Click [Set start channel]. Click the right side of the corresponding channel. After selection, this channel will become the first channel to receive transmitter signals. Click ❮ to return to the previous level interface.
5. Click [Start bind]:
- When the RF standard selection is AFHDS3 two-way, the receiver indicator is on, indicating the bind is successful. The transmitter will automatically exit the bind interface.
- When the RF standard selection is AFHDS3 one-way, the receiver indicator flashes slowly. Click to exit the transmitter bind interface. After the exit, the receiver indicator is on, indicating the bind is successful.
6. The bind is successful. Take off the power cord from the receiver.
7. Reconnect the power cord to the receiver. Check whether the servo is working properly. If a bind is required again, repeat the above steps.
- If you want to use the dual receiver mode, click the ☑ check box on the right side of [Dual Receiver Mode]. The icon will change and then the transmitter will enter dual receiver mode. After selection, bind the transmitter with the primary receiver and the secondary receiver in turn.
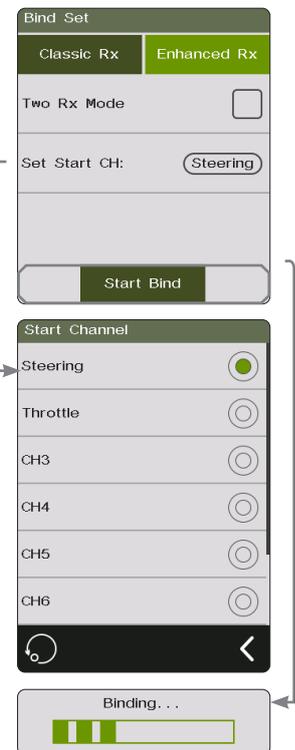
[Two Receiver Mode]

For a standard car and boat model, the FGr8B receiver with 8 channels can satisfy the requirements.

This function can be used when you have two models that you want to control with the same transmitter.

For Model Menu with more complex functions, such as excavators (loaders) with extended fuel lines, dump trucks with hydraulic booms, etc., the FGR8B with 8 channels is not enough. It needs to be determined according to the number of functions. You can assign two receivers to the vehicle base function and the boom base function, and then switch between them with Noble Pro's [Two Receiver Mode] function. Noble Pro has only 18 output channels. When the number of combined dual receiver channels exceeds the number of channels pre-selected by the transmitter, extra channels cannot be used.

- When disconnecting the primary receiver or secondary receiver, the function of one receiver will not be affected.

Classic Rx	Enhanced Rx
Two Rx Mode	☑
Set Master Start CH: (Steering)	
Set Slave Start CH: (Steering)	
Bind Master RX	Bind Slave RX

7.2 Steering Force

This function is used to adjust the amount of steering force when the receiver servo is steered.

This function can be set when the transmitter RF Setting is set to [Mini-Z(FHSS)]. It is hidden when the RF is set to other standards.

Setup:

1. Click "+" or "-" to change the percentage of steering force. The adjustment range is 0-100%, and the adjustment step is 1%. It also can be adjusted by assigning TR/VR key or knob in the [Key Setting] function.

1:Flysky 01	TX
Steering Force	
Steering Force	62%
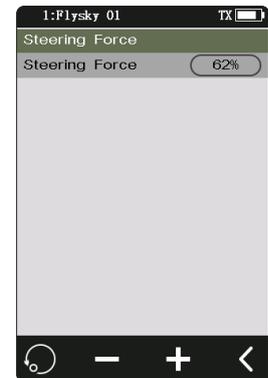
7.3 Gyro Gain

This function is used to adjust the sensitivity of the gyroscope on the receiver.

This function can be set when the transmitter RF Setting is set to [Mini-Z(FHSS)]. It is hidden when the RF is set to other standards.

Setup:

1.Click "+" or "-" to change the percentage of gyroscope sensitivity. The adjustment range is 0-100%, and the adjustment step is 1%. It also can be adjusted by assigning TR/VR key or knob in the [Key Setting] function.

1:Flysky 01	TX
Gyro Gain	
Gyro Gain	62%
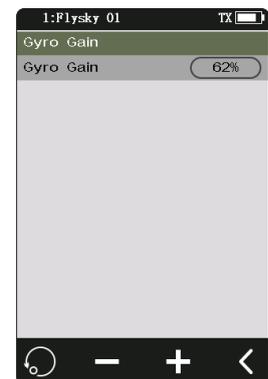
7.4 RX Interface Protocol

This function is used to set the receiver output mode.

When the adapted receiver is FGr4, FGr4S, FGr4P, FTr4, FTr10 and FTr16S, [Output] can be set to PWM or PPM. [Serial Protocol] can be set to i-BUS or S.BUS (please refer to [7.5 i-BUS Setting] for specific i-BUS setting).

Setup:

1. Click [Receiver Interface Protocol].

2. Click the right side of the corresponding function. Click ◄ to return to the previous level interface.

The output mode of receiver NPA/NPB/NPC/NPD interface can be set when the adapted receiver is other enhanced receivers.

For the NPA/NPB/NPC/NPD interface of the primary receiver, the output modes include PWM, PPM, S.BUS, i-BUS in, i-BUS out and i-BUS2.

- When the NPA interface is set to PPM output, the other interfaces support PWM, S.BUS, i-BUS in, i-BUS out and i-BUS2 signal output.

The output modes for the secondary receiver NPA/NPB/NPC/NPD interface are PWM, PPM, S.BUS, i-BUS out and i-BUS2.

- When the RX i-BUS 2 HUB simulator function is disabled, you can select only once for PPM, S.BUS, i-BUS in, i-BUS out and i-BUS 2 signals in multiple new ports. For example, if NPA is set to i-BUS out, NPD/NPC/NPB/NPA should not be set to i-BUS out.

- The simultaneous conflict of i-BUS and i-BUS 2 transmission information is prohibited. When any new port is set to i-BUS out or i-BUS in, other new ports should not be set to i-BUS 2. If any new port is set to i-BUS 2, other new ports should not be set to i-BUS out or i-BUS in.

- When the RX i-BUS 2 HUB emulator function is enabled, multiple new ports can be set to one type of signal, such as NPA ~ PWM, NPB ~ PWM, NPC ~ i-BUS 2 HUB, and NPD ~ i-BUS 2 HUB.

[i-BUS in]: connects to i-Bus sensor.

[i-BUS out]: connects to i-Bus extension receiver or other i-Bus signal recognition device.

[i-BUS2]: When the receiver i-Bus2 HUB simulator function is disabled, only 1 i-BUS2 signal output is allowed. When the receiver i-BUS2 HUB simulator function is enabled, 1-4 i-BUS2 signal outputs can be selected.

Setup:

1. Click [Receiver Interface Protocol]. When the bind setting is in dual receiver mode, select the primary receiver or the secondary receiver to enter the submenu.

2. Select [NPA] or other options. Click the right side of the corresponding function.
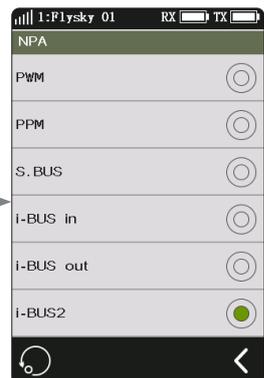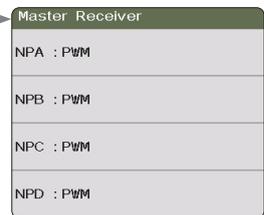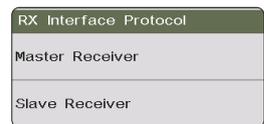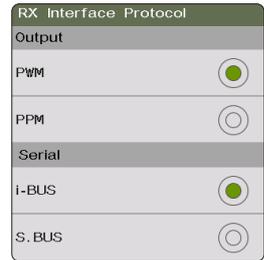
7.5 Servos Frequency

This function is used to select the frequency of channel data PWM signals. The function includes analog servo (95 Hz), digital servo (380 Hz), and custom frequency. You can select or set the correct output frequency value according to the servo used. By default, the system adopts the digital servo. The custom frequency adjustment range is 50-400 Hz.

The servo response speed varies slightly with the connected receivers.

To connect to the classic receiver:

1. Click [Servo Response Speed].Click on the right side of the corresponding function.

- If the transmitter RF Setting is set to [AFHDS3 one-way], modify the servo response speed and then press the ◄ exit button. The system prompts "It takes effect after bind or re-bind. Are you sure you want to bind?"

3. If you choose [Custom Frequency], click the "+" or "-" to adjust the frequency.

To connect to the enhanced receiver:

[SR]: one of the specifications in the servo response speed (PWM frequency is 833 Hz).

[SFR]: one of the specifications in the servo response speed (PWM frequency is 1000 Hz).

[Synchronization with radio frequency]: the digital signal of low frequency is synchronized with the digital signal of radio frequency.

Note: the conventional servo response speed (PWM frequency) is 50-400 Hz. The delay of the whole system will be greatly improved when SR and SFR are selected. Make sure that the adapted servo supports the corresponding frequency. Otherwise, it may cause the servo not to work properly or even damage the servo.

1. Click [Servos Frequency1] menu. Click [Direction: Digital Servo] or other options to enter the function setting interface.

2. Click the right side of the corresponding servo response speed according to the actual state of the adapted receiver. Click ❮ to return to the previous level interface.

Click the check box on the right of [Synchronize with RF]. The icon will change to ☑ . The servo response speed of this function will be synchronized to RF after it is checked.

3. If you choose [Custom Frequency], click "+" or "-" to adjust the frequency.

7.6 Failsafe

This function is used to protect the models and users if the receiver loses signal and therefore is no longer controllable.

A list of four channels is displayed under the failsafe menu. If [Free] is displayed next to a channel, it means that after the model loses the signal, the channel will continue to maintain the last position before the failsafe kicked in. If a percentage is displayed, it means that after the model loses the signal, channel will move to the position that position and stay there.

Note: when the failsafe function is tested, press the 📶 icon for more than 1 second. The radio frequency output will be disabled. The radio frequency output will be normal when you release the icon. If you press the 📶 icon for less than 1 second, the system will prompt "Pressing the icon for one second to turn off the output of RF!" with pop-up window reminder.

• Please do not touch this icon during normal operations to avoid damaging your transmitter models or hurting your body.

Setup:

1. On the [Failsafe] interface, click the icon on the right of [i-BUS/PPM No Output]. After cancelation, the corresponding i-BUS/PPM signal will have no output when the model loses signal.

2. Select the desired channel to enter this channel setting interface. Click the right side of the corresponding function.

3.Move the throttle trigger, steering wheel, button, or knob of the corresponding channel to the desired setting position and keep it. Click the icon to complete the setting.

You can also use [Set All Fixed Value Channels] to set the failsafe for all channels at the same time.

This function can only be set for channels that have failsafe enabled.

Note: Gas powered models are slightly different when it comes to failsafe setup.

Gas powered: It is recommended to set failsafe for the vehicle's brake, that is, set the throttle channel output value of the vehicle as if braking.

Battery Powered: 1. It is recommended that the failsafe is set so that it stops the vehicle, that is, set the throttle channel value of the vehicle in a neutral position.

2. It is also possible to set the failsafe to auto brake in case of signal loss.

• Some ESCs also use breaking as reverse, make sure to check this with your model.
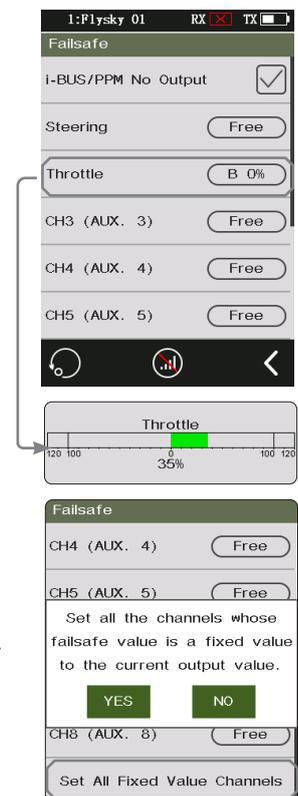
7.7 i-BUS Setup

This function is used to set up the i-BUS expansion module.

The i-BUS function is mainly used for servo expansion. If a cable is too short or the number of servos exceeds the outputs for the receiver, the i-BUS module provides a convenient option for expansion. When using the i-BUS receiver, make sure that it is powered separately to ensure that servos have sufficient power.

FS-CEV04 Schematic(FGr8B)   FS-CEV04 Schematic(FGr4B)

Setup:
1. Turn on the transmitter, enter [SYSTEM], touch [Channel Number Definition], and select the number of channels to be set (optional 2、4、6、8、10、12、18 channels, the system defaults to 8 channels).

2. Go to [RX SET] and bind the transmitter and receiver (see user manual for more information).

3. Touch [RX Interface Protocol] and select "i-BUS" (if "Sensor" is selected, the i-BUS port on the receiver cannot be used for channel expansion).

4. Connect the FS-CEV04 to the FGr8B/FGr4B receivers "i-BUS out" port.

5. Touch "i-BUS Setup" and select the channel to be assigned, (touch "channel X", the system display a "Assigning channel X, Press the corresponding key on the serial BUS receiver to assign") Use the appropriate tool to press the K1, K2, K3 or K4 button on the FS-CEV04 to assign the selected channel to C1, C2, C3 or C4. If successful, the transmitter will display: "Channel assigned to interface X / Servo X".

6. Connect the servo to the corresponding port and check if it is working as expected.

7. Repeat the above steps as needed.
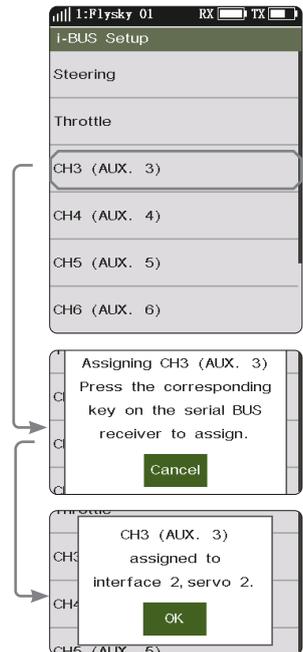
7.8 Config PWM Converter

This function allows you to configure the corresponding receiver to a PWM converter (hereinafter referred to as a secondary receiver).

Setup:

Note: Shut down the receiver.
1. Set the receiver to the bind state.
2. Turn on the transmitter. Enter the [Config PWM Converter] menu. Click the right side ◉ of [i-BUS to PWM].This function allows you to configure the corresponding receiver to a PWM converter (hereinafter referred to as a secondary receiver).
3. Click [Start channel] to enter the submenu and select the corresponding channel as the first interface output of the receiver. Click ◀ to return to the previous level interface.
4. Click [Servos Frequency] to enter the submenu. Click the corresponding option on the right side. You can customize the frenquency of the servo. The range can be50 Hz to 400 Hz.
•   When you select i-BUS2 to PWM, the operations of steps 2 and 3 are not required.
5. Click [Start Config]. The system will enter bind status. The secondary receiver indicator will flash twice and go off. It indicates successful configuration. Click ◀ to manually return to the previous level interface.
6. RX re-enters the bind state to complete the bind with TX. After successful, the receiver can resume normal use.
•   Confirm that only new port A selects i-BUS2 signal.
•   When i-BUS2 receiver operates as the secondary system, the channel assignment and servo response speed are set under i-BUS2 HUB menu.
•   If you perform a re-bind, the secondary receiver parameters will be invalid. Re-configuration is required when it operates as the secondary receiver again.

7.9 RSSI Output Setup

This function is used to set the channel of transmitter output signal strength, and transmit the signal strength to the model through the channel.
•   The range of the transmitter signal strength is 0-100.
•   When the signal strength is 0, the signal strength may still be calculated or the transmitter does not receive the signals from the receiver.
•   After setting the channel, the channels corresponding to PWM, PPM, i-BUS out, and S.BUS indicate the signal strength. It will be invalid if the channel is assigned with other functions.

Setup:
1. Select the check box on the right side of [On] to enable this function.
2. Click [Output Channel] to select the right side ◉ of the corresponding channel.

7.10 RX Battery Monitor

This function is used to detect the voltage status of the receiver battery. Set the high and low battery voltages according to the actual usage of the receiver battery and the remaining battery level displayed through the icon in the upper right corner. The transmitter will promptly send an alarm according to battery conditions.
When the receiver battery voltage is lower than the [Alarm voltage] alarm value, the transmitter will report "The receiver voltage is low".
[Sensor]: The voltage of the Voltage sensor is used as the voltage of the receiver. [Internal Voltage], [External Sensor Voltage] or [BVD Voltage] can be selected. After selection, it can be displayed and alarmed through the transmitter.

Setup:
1. Click [External Sensor] to select an internal or external sensor.
2. Set the [Low voltage], [alarm voltage], and [high voltage] values.
    • [Low Voltage]: The voltage corresponding to Receiver battery level is 0%; [High Voltage]: The voltage corresponding to Receiver battery level is 100%.
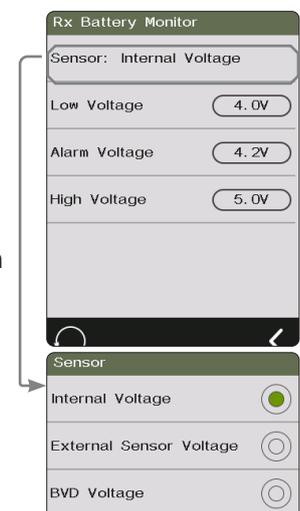
7.11 BVD Voltage Calibration

The BVD voltage is calibrated in the post-factory settings. This function can be used to calibrate when there is a large deviation between the detected voltage and the actual voltage.The BVD voltage value can be adjusted in the range of 0 to 100 V.

Setup:

Connect the BVD detection line correctly before setting, and then perform calibration.
Note: please refer to the voltage value of multimeter for calibration.
1.Click [BVD voltage calibration] to enter the function setting interface.
2.Click the "+" or "-" to change the battery voltage value as needed.
3.Click [Calibrate]. After successful calibration, click "Yes" in the pop-up window reminder.
• This function can be set in case of an enhanced receiver.
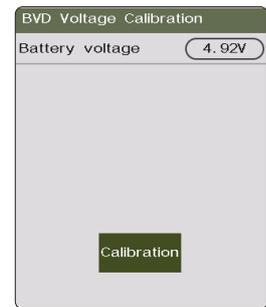
7.12 Range Test

This function is used to test whether wireless communication between the transmitter and the receiver is normal.

As the actual remote control distance between transmitter and receiver is far, it is hard to test whether the radio frequency is normal by controlling a distance of several hundred meters between the transmitter and receiver in practice. Theoretically, the remote control distance in this function will be reduced to 30-40 meters. So, you can test whether wireless communication between the transmitter and the receiver is normal at a close distance when the function is enabled. This can save testing time.

Setup:

1. Make sure the transmitter and receiver are bound.

2. Enter the [Range Test] menu and press the SW1-R button.

3. Have one person hold the transmitter and stay in place as someone else slowly walks away from the transmitter with the model.
   • Please make sure the transmitter is installed with phone holder, with use of the standard firmware.
   • Make sure that the transmitter antenna is unobstructed and that there are no objects or sources of interference between the transmitter and receiver.

4. Check the RSSI on the receiver to make sure that the signal is strong and stable.
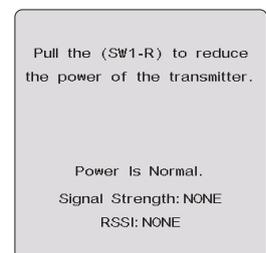
7.13 Low Signal Alarm

This function is used to enable or disable the low signal alarm function.

[Low Signal Alarm] If checked, the system will alarm automatically if the signal strength of the receiver is lower than 30.

7.14 Update Receiver

After each transmitter update the receiver will need to be updated.

Setup:

Touch [Update Receiver]:

- Some receivers such as GMR and INr4 need to be updated with "Flysky Assistant".

If the transmitter has successfully coded and the connection is established, if the receiver is the latest version, a pop-up prompt will appear [The current version is the new version, no upgrade is required!]. If the transmitter is an old version, a pop-up prompt [Are you sure to update the receiver?]. Click [Yes] to update the receiver;

If the receiver and the transmitter are not connected, then enter the receiver selection interface (FGr8B/FGr4B needs to be placed upright when in use), check the receiver to be connected and pop up a prompt [Please connect XX or enable XX enter the mandatory update mode] Click [OK]!

After entering the update, When the progress is 100%, the update is successful.

Note: You must update the high frequency before updating the receiver.
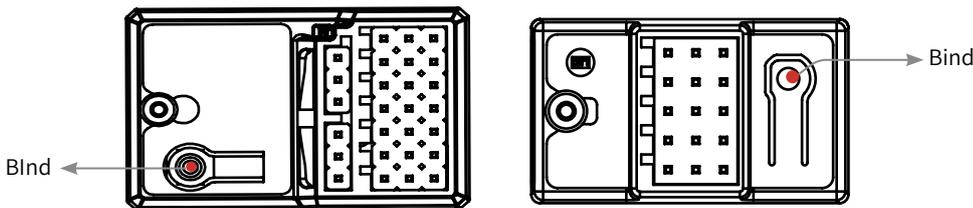
The steps of the forced update of the receiver are as follows:

1. Press the bind key on the receiver. Then, release the bind key after the indicator flashes three times and goes off ten seconds later than the power-on.

2. Power on the transmitter and select [Update Receiver]. Click the right side ⦿ of the corresponding receiver. Select "OK" on the pop-up box. Click [Update] to enter the update state.

3. The update is complete. The indicator flashes slowly.

8 SYSTEM

8.1 Units

Choose what units to use for length and temperature.
Choose what units to use for length and temperature.
[Length] can select metric and imperial system. The default is metric.
[Temperature] can be selected in Celsius and Fahrenheit. The default is Celsius.
The box highlighted in light green is the currently selected setting.

Setup:
1. Touch "unit" to enter the menu.
2. Select a unit from the list.
3. Touch the back icon ❮ to return to the previous menu.
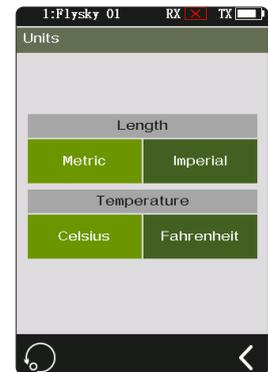
8.2 Backlight adjustment

This function controls the backlight brightness.
Note: Turning the brightness up will use more power and as such will lead to reduced battery life.

[Backlight Timeout]: Select the delay time.

[Max Backlight]: The adjustment range is 10%-100%. Click the "+" or "-" icon to change the percentage as required.
[Mini Backlight]: The adjustment range is 0% -50% (the screen is not bright at 0%). The adjustment method is the same as above.

After selecting, click the back icon ❮ to return to save.
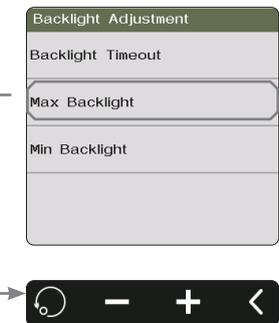
8.3 Sound

This function is used to toggle all system sounds, including alarm sound, power-on/power-off sounds and and adjust the volume.

[Volume]: Touch volume then select the desired volume from the list. Touch the back icon ◄ to return to the previous menu.

[System sound]: Click the option box on the right side of the interface. The icon will change to ☑, indicating that the system sound is enabled. The system will give a prompt sound in the following scenarios:

- The system will give a prompt sound when users click the transmitter function icon and sets the icon or flip the transmitter interface.
- The system will give a prompt sound each time a key is toggled.

[System Sound]: Toggle system sounds by touching the box to the right of "System sound". If there is a check in the box it is enabled.

- When the transmitter is not used for a long time exceeding the set idle alarm time, the system will give a continuous "beep" alarm.
- When the high voltage alarm or low voltage alarm in the selected sensor exceeds the set value, the system will give an alarm prompt.

[Alarm sound] and [Power On/Off sound] are the same as above.
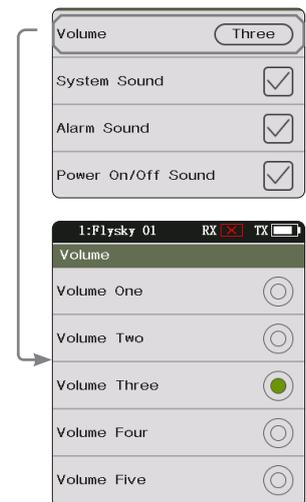
8.4 Vibration

This function is used to enable or disable the system vibration and alarm vibration function and adjust intensity of vibration levels.

[Vibrate Level]: Touch "Vibrate Level" then select the desired strength from the list. Touch the back icon ◄ to return to the previous menu.

[System Vibrate]: Toggle system sounds by touching the box to the right of "System Vibrate". If there is a check in the box it is enabled.

[Alarm vibration]: click the option box on the right side of the interface to enable the alarm vibration. There are alarm prompts in the following scenarios:

- The transmitter has not been used for a long time, exceeding the set idle alarm duration.
- The high voltage alarm or low voltage alarm in the selected sensor exceeds the set value.

8.5 LED

The LED function can change the color of the LED strip above the power button of the transmitter, the power indicator and the brightness adjustment of the strip.

[Type selection]
1. You can choose to turn off the LED.
2. LED can be used for power indication (displaying different colors according to current battery voltage);
    - High-green
    - Medium-yellow
    - Low-red
3. Select a color from the list.

[Brightness control]: Touch the "+" or "-" icon to adjust the LED brightness. After setting, click the icon to return to save.

Touch the back icon ◄ to save and exit.

8.6 Home-Screen Quick Access

This function is used to set up the Up, Down, Left and Right quick sliding screen functions of the main interface. Users can customize the sliding screen interface according to their needs.

The [Home-Screen Quick Access] can help users find setting interfaces quickly. For example, when users want to check the lap counting time after the function is enabled in the model operations, users can use this function to enter the timer interface quickly.

Function settings:

1. Enter in the function interface, click the corresponding function option to choose it; and select NONE to avoid quick operation;

2. Click back icon ◀ so you can save the settings.

8.7 Mian Screen Lock Setup

This function is used to set the state of the transmitter after the main interface is locked.

[Lock only touch screen]: can prevent the transmitter screen from being touched by mistake, because this may change the parameters that have been set.

[Only channel controllable after lock]: only the channel is controllable after selection. This can avoid changing the set parameters when someone else perform operations or accidentally toggles a switch for personal reasons.

[Only the steering wheel trigger controllable after lock]: after locking, all knob trims are unavailable. This can prevent others from modifying channel data when operating on behalf of others or changing setting parameters by accidentally toggling a switch for personal reasons.

You can click the ◉ icon on the right of the corresponding function according to your needs.
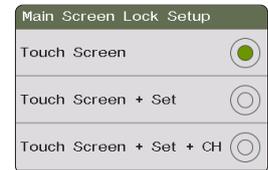
8.8 Standby Timeout

The system will automatically shut down when the transmitter is not used for a long time. This function allows you to set the alarm time to prompt you to use it.

Select [None]. It means the transmitter system has no idle alarm. After selecting other durations, the system will continuously send out alarm prompts when idle time exceeds the set value. If the alarm sound is disabled, the system gives only a vibration prompt.

8.9 Auto Power Off

If the transmitter is powered on for a long time, the transmitter battery may be used up. If the system detects that the transmitter is not used for a long time, it will be automatically shut down.

If no operation is detected within five minutes, the system starts playing no operation sound, Auto Power Off will turn off the transmitter if no receiver is connected .

To toggle Auto Power Off touch the box to the right of the setting. If there is a check in the box the function is active.

8.10 Stick Calibration

Stick Calibration calibrates the trigger and wheel so that their center and outer positions are correct. The green bar is the channels current position and the calibrated range will be grey like the background.

Calibration:
1. Move the wheel and trigger as far as they can go in each direction.
2. Touch the ◁ icon to save and return to the previous menu.
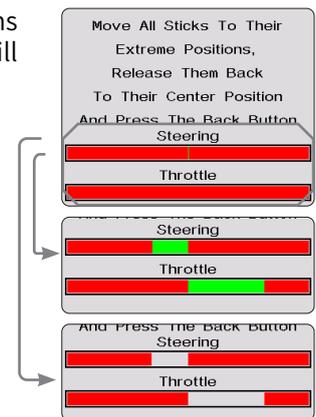
8.11 FirmWare Update

The internal software of the transmitter can be updated using the USB interface connected via a windows computer. Once this function is activated, all functions of the transmitter stop. To avoid any loss of control of the vehicle, turn its receiver off before entering this mode.
When the firmware is updating, never disconnect the USB cable or remove the battery or the transmitter.

Setup:
1. Download and open the newest official software.
2. Connect a transmitter with a computer by USB cable.
3. Touch [Firmware Update], after which "Updating the transmitter firmware may cause model data to be restored to the factory defaults. Are you sure?" will be displayed. Touch "Yes", to enter update mode.
4. After completing the above steps, click [Update] in the software on your computer to start the update.
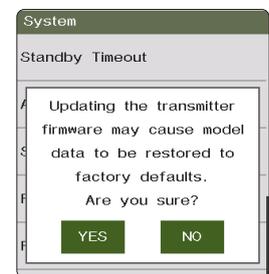
Note: The model data will be reset after the firmware update.

8.12 Factory Reset

Factory Reset resets all of the transmitter settings and functions back to their factory default state.

Reset:
Touch "Factory Reset", then touch "YES" when prompted.

Tips: to avoid mis-operations, please do not use this function.
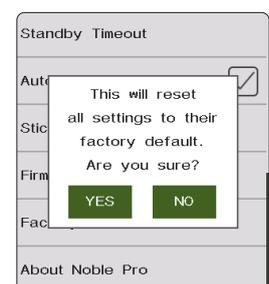
8.13 About Noble Pro

This function contains basic information such as product name, firmware version, version date, hardware and RF library version.

9. Product Specification

This chapter includes specifications for Noble Pro transmitters, FGr8B receivers and FGr4S receivers.

9.1 Transmitter Specification (Noble Pro)

Product model	NB4 Pro
Product name	Noble Pro
Channels	2 (Fast)、4、6、8、10、12、18 Optional
Model	car, boat, Robot, Ironclad
RF	2.4GHz ISM
RF Power	< 20 dBm
2.4GHz Protocol	AFHDS 3
Distance	> 300m (without stand)
Channel Resolution	4096
Battery	1S / (4.2V) lithium polymer battery + 18650 dual battery
Charging Interface	Micro USB + wireless charging
Low Voltage Warning	< 3.65V
Antenna Type	Built-in single antenna
Display	HVGA 3.5-inch TFT color screen, resolution 320 * 480, LCD white backlight, capacitive touch screen
Simulator	USB Simulator
Data Interface	Micro USB
Temperature Range	-10℃—+60℃
Humidity Range	20%-95%
Online Update	Yes
Color	Black
Size	120x144x274 mm
Weight	670g (include stand)
Certification	CE，FCC ID：N4ZFG400，MIC,RCM

9.2 Receiver Specification (FGr4B)

Product model	FGr4B
PWM	4
RF	2.4GHz ISM
2.4GHz ISM Protocol	AFHDS 3
Suitable transmitters	Suitable for all transmitters supporting the AFHDS3
Antenna Type	single antenna
Power	3.5-9V
Data port	PWM/PPM/i-Bus/s.bus/i-Bus2
Temperature range	-10℃—+60℃
Humidity Range	20%-95%
Online Update	Yes
Size	17*29*16.6mm
Weight	6.4g
Certification	CE, FCC ID: N4ZFGR4B000

9.3 Receiver Specification (FGr8B)

Product model	FGr8B
PWM	8
RF	2.4GHz ISM
2.4GHz ISM Protocol	AFHDS 3
Suitable transmitters	Suitable for all transmitters supporting the AFHDS3
Antenna Type	single antenn
Power	3.5-9V
Data port	PWM/PPM/i-Bus/s.bus/i-Bus2
Temperature range	-10℃—+60℃
Humidity Range	20%-95%
Online Update	Yes
Size	35*23.3*13.3mm
Weight	9.4g
Certification	CE, FCC ID: N4ZFGR8B

10.Packing List

Serial number	Name	Quantity	Packing method	Remarks
1	Noble Pro transmitter	1	Control box	Contains the mobile phone holder, base
2	FGr4B receiver	1	Static bag	Includes instruction sheet and BVD cable
3	FGr8B receiver	1	Static bag	Includes instruction sheet and BVD cable
4	USB Data Cable	1	Static bag	
5	XL hand glue	1	PE bag	
6	Hand strap	1	PE bag	
7	L steering wheel	1	/	
8	L steering wheel sponge	1	/	
9	1.5 mm wrench	1	PE bag	
10	2.5 mm wrench	1	PE bag	
11	Brake pads	1	PE bag	
12	Thread set screw	2	PE bag	
13	Knob	2	PE bag	
14	S spring	2	PE bag	
15	L spring	2	PE bag	
16	S throttle trigger adjustment block	1	PE bag	
17	L throttle trigger adjustment block	1	PE bag	
18	Plastic throttle trigger adjustment block	1	PE bag	
19	Back bracket	1	PE bag	
20	Angle bracket	1	PE bag	
21	Bolt	1	PE bag	
22	Nut	1	PE bag	
23	Wireless charger base	1	/	
24	Company logo sticker	1	/	
25	Company product sticker	1	/	
26	Quick operation guide	1	/	

11. Instructions

11.1 Brake Pad Replacement and Angle Adjustment

1

▶ First insert a hexagonal screwdriver into the screw hole used to secure the steering wheel.

2

▶ Turn the hexagonal screwdriver counterclockwise until the screw is completely loose and remove it.

4

▶ Pinch the brake pad with two fingers and take out upwardly.

3

▶ Take out the steering wheel upward.

5

▶ Prepare the brake pads for replacement and two screws. Use a hexagonal screwdriver to fix the screws on both ends of the brake pads in turn.

6

▶ Align the brake pads installed with the screws upwardly and press firmly to secure the brake pads in the slots.

7

▶ Place the tube of the steering wheel in the brake pad adjustment hole on the protruding connector on the brake pad, and press the steering wheel to fix it.

8
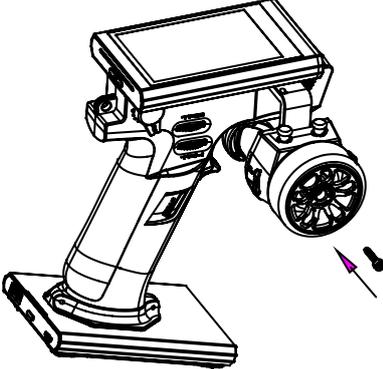
▶ Insert the screw into the screw hole used to secure the steering wheel, then align the hexagonal screwdriver with the hexagonal hole in the head of the screw, hold the side of the steering wheel with one hand and turn the screwdriver clockwise with another hand until the screw is secured.

10
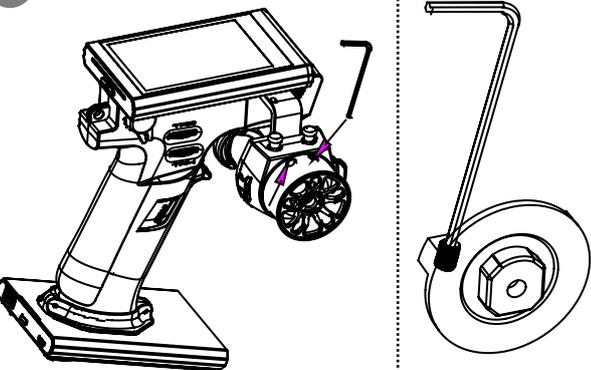
▶ Insert the hexagonal screwdriver into the two adjustment holes at the top of the steering wheel and adjust the rotation angle of the steering wheel as needed.

• The tighter the screw, the smaller the rotation angle. The looser the screw, the larger the rotation angle.

9
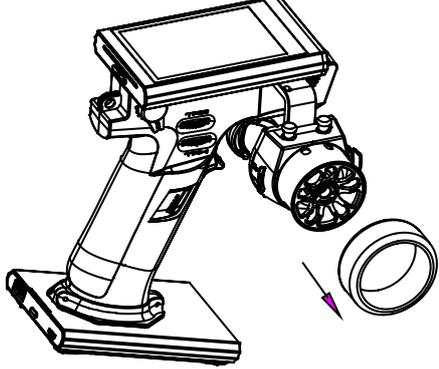
▶ Take the steering wheel sponge after fixing the screws.

11
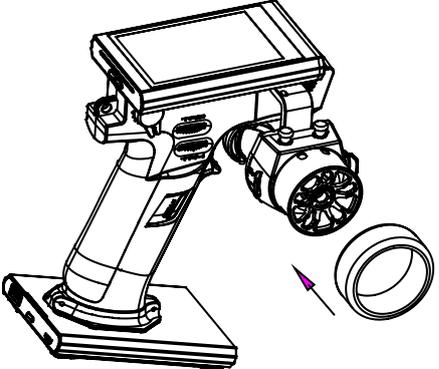
▶ Reinstall the steering wheel sponge after adjusting the brake pads.

12
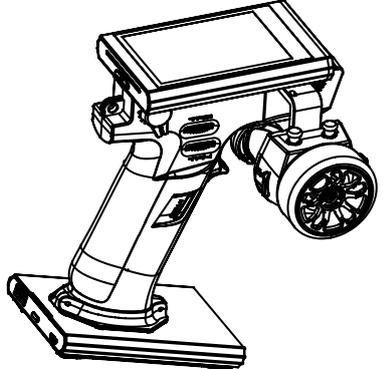
▶ The installation is complete. The transmitter can be used normally.

! Pay attention to your strength in the process of replacing the brake pads. Remember not to damage accessories. Please refer to the above steps to replace the brake pads, to ensure that the brake pads can be used normally.

11.2 Installation of Mobile Phone Holder

1

▶ Insert the screws into the screw holes on both sides of the bottom holder shell. Connect the left and right sides of the holder shell in turn. Use a hexagonal screwdriver to turn clockwise until the screws are fixed.

2

▶ Face the installed holder shell handle upward and align both sides of the holder shell with both sides of the transmitter display screen.

▶ Gently push the holder shell until both sides of the holder shell can completely cover the display screen.

3

▶ Connect the holder shell with the holder connector to the top of the screen. Press the holder shells on the left and right sides by hand and insert the screws into the screw holes.

4

▶ Turn the screwdriver clockwise in sequence to secure the screws on the left and right sides.

5

▶ Connect the holder connector to the holder head on the transmitter. Align the connection hole and insert the long screw. Set the nut on the other end of the screw and gently install the nut clockwise by hand to make it fixed.

• Choose whether to install the connector as required.

• Pay attention to the direction of the connector.

6

▶ Ensure the holder connector is installed.

7
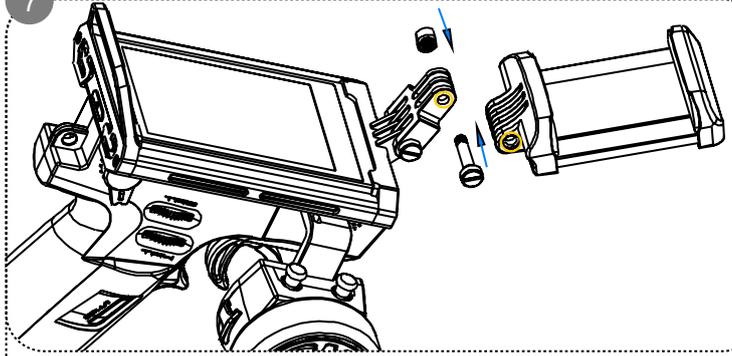
▶ Connect the phone holder to the other end of the holder connector. Align the connection hole and insert the long screw. Set the nut on the other end of the screw and gently install the nut clockwise by hand to make it fixed.

8
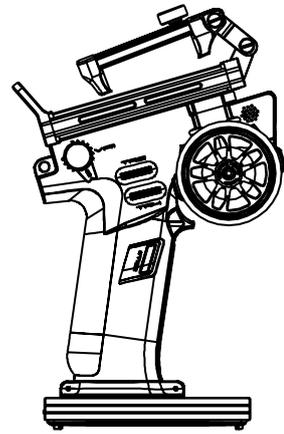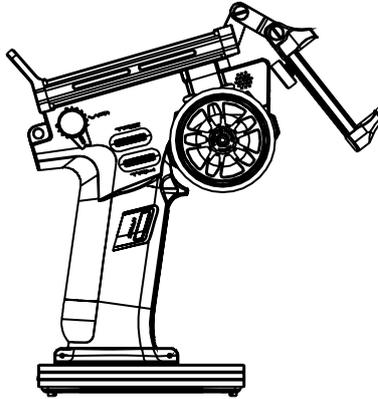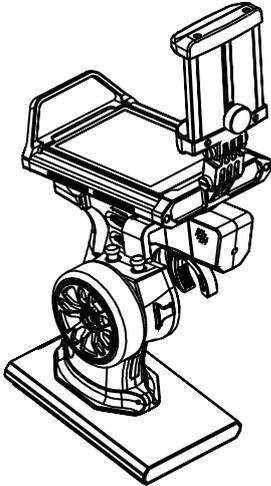
▶ After installation, twist the holder to ensure the holder is flexible and is firmly fixed.

11.3 Disassembly of Mobile Phone Holder

1
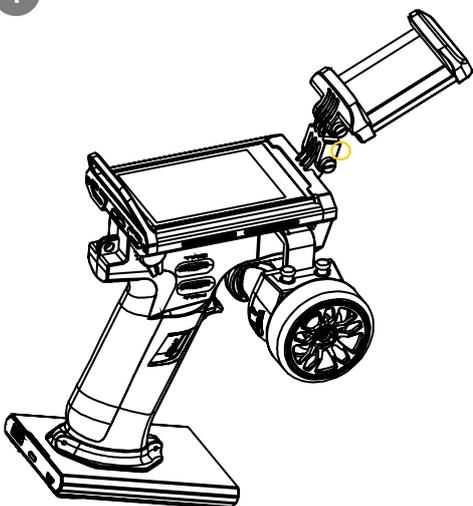
2
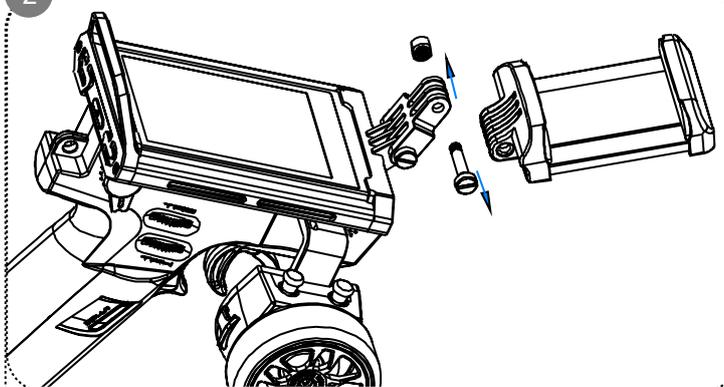
▶ Gently unscrew the nut connecting the holder connector and the phone holder counterclockwise by hand until the nut is completely loose. Then remove the screw, nut and holder.

3
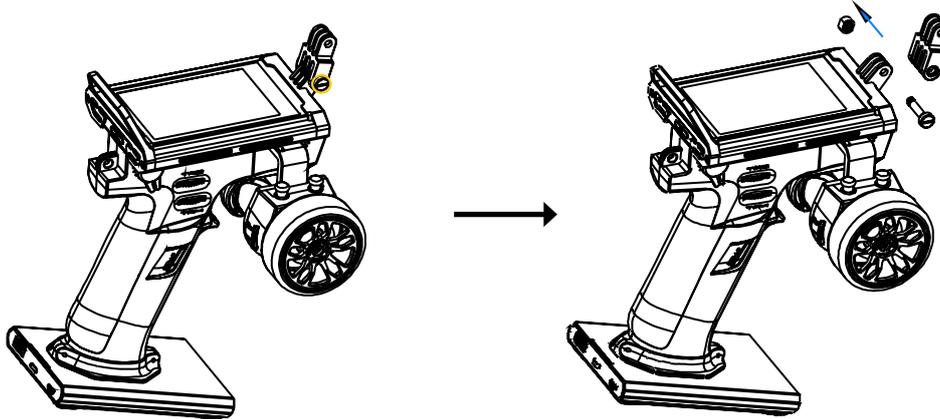
▶ Gently unscrew the nut connecting the holder connector and the holder shell counterclockwise by hand until the nut is completely loose. Then remove the screw, nut and holder.

4
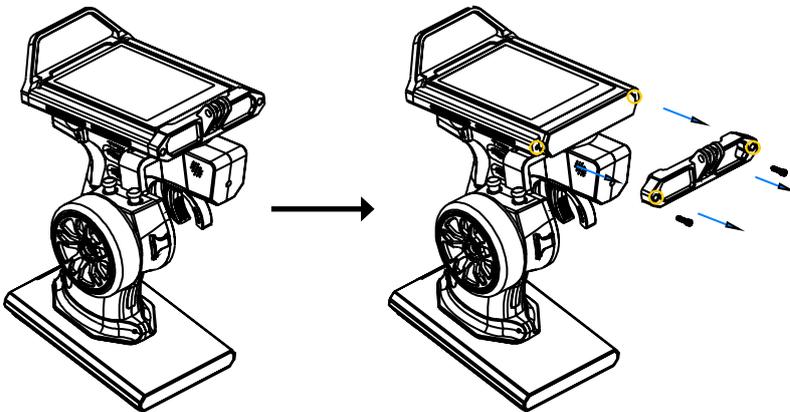
▶ Use a screwdriver to connect the screws on both sides of the top of the screen. Gently turn the screwdriver counterclockwise until the screws on both sides are completely loose. Remove the screws and take off the top holder shell.

5
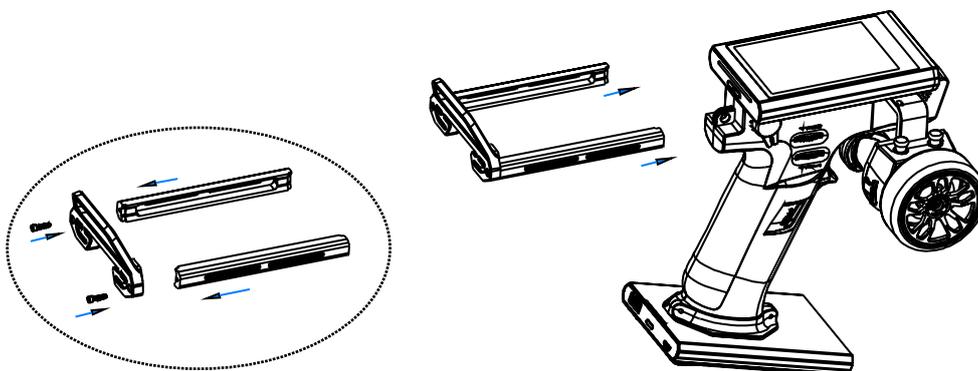
▶ Gently remove the remaining holder shell. Do not scratch the sides of the transmitter screen. Remove the screws on both sides of the holder shell with the handle in turn.

! Pay attention to your strength in the Disassembly of Mobile Phone Holder process. Remember not to damage accessories.

11.4 Wireless Charging Function and Precautions

Wired Charging Method

▶ The transmitter base can be charged directly by connecting the USB data cable.

**Wireless Charging Method**
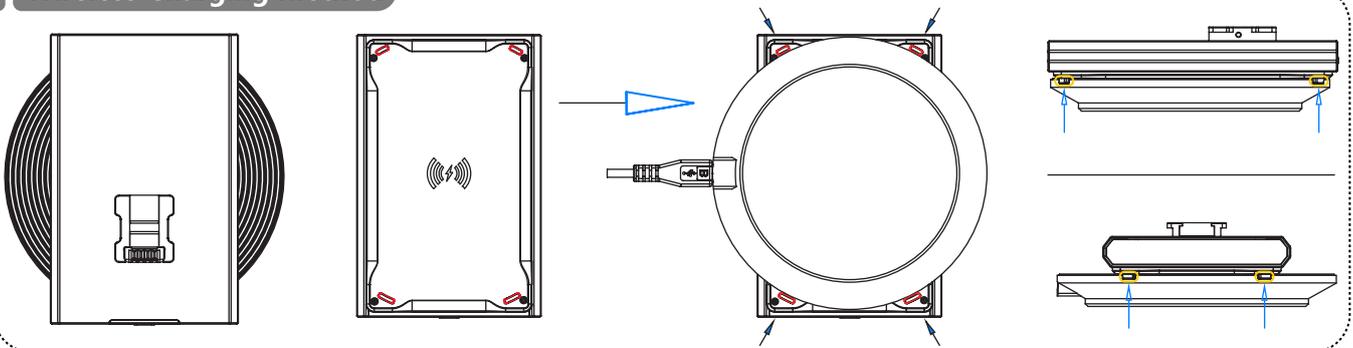
- The four bumps of the transmitter base should be connected to the base of the wireless charging transmitter.
- When the transmitter base indicator of the wireless charger is blue, it indicates the connection is successful and there is ongoing charging.
- When the transmitter base indicator of the wireless charger is red, it indicates the transmitter base is not connected, or the connection failed.
- When the transmitter base indicator of the wireless charger is blue and solid on, it indicates that the battery is fully charged. It takes about 8.5 hours to fully charge in the entire system (including the transmitter, base, and wireless charger base).
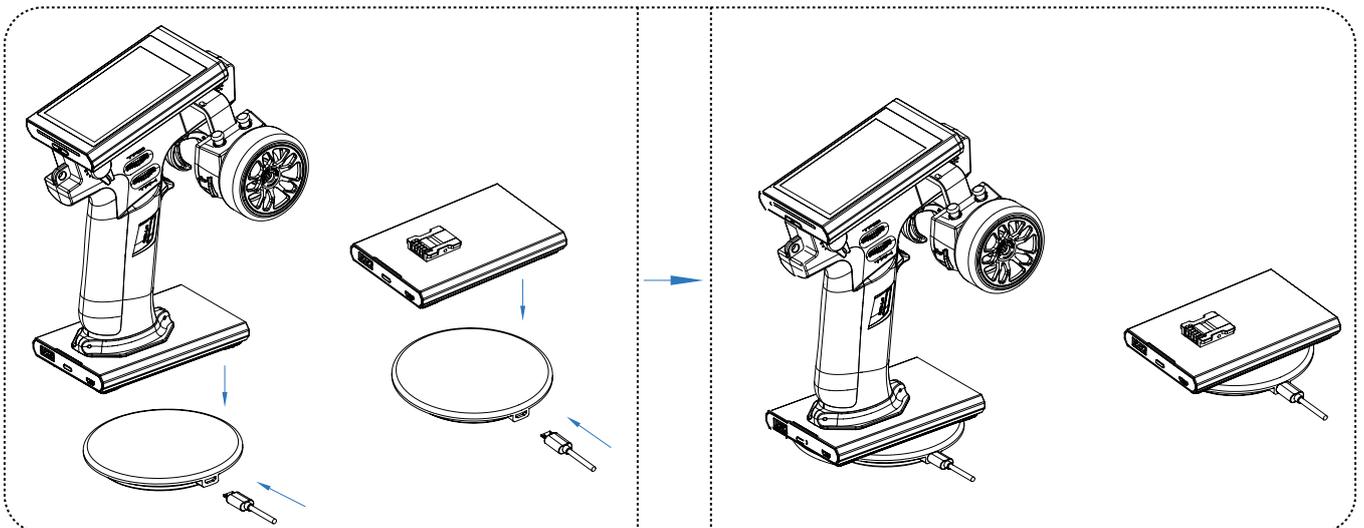
⚠ If the transmitter base of the wireless charger is not used properly, it will lead to ineffective charging, or the charging efficiency may be affected.

There are the following non-standard operations: transmitter base is not aligned with the wireless charger base, the base may be tilted, or the four bumps are not connected to the base.

11.5 Replacing VR1 Knob as a Three-position Switch

1

▶ Make sure that the knob needs to be replaced with a three-position switch.

2

▶ Turn the knob clockwise until the knob is loose. Pinch the knob with the thumb and index finger and then lift it upward to remove the knob.

3

Potentiometer handle cap
Angle limiter

▶ Prepare a three-position switch to be replaced by first aligning the angle limit flap of the three-position switch with the angle limit slot on the transmitter, then align the potentiometer handle cap of the switch with the potentiometer handle of the transmitter. When the angle limit flap and the potentiometer handle cap are aligned at the same time, press the switch firmly by hand.

4

1-position state

2-position state

3-position state

▶ After installation, turn the knob left and right to test if it is installed correctly.

⚠ Pay attention to your strength in the process of replacing the three-position switch to avoid damaging accessories.

Please refer to the above steps for installation. Make sure the product can work properly after installation.
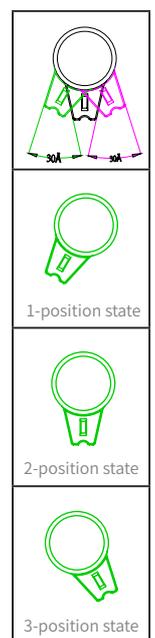
11.6 Replacing the 3-position Switch as VR1 Knob

1

2

▶ Remove the three-position switch upwardly.

4

3

▶ Align the knob with the potentiometer handle cap and press down hard on the knob until the knob is completely fixed.
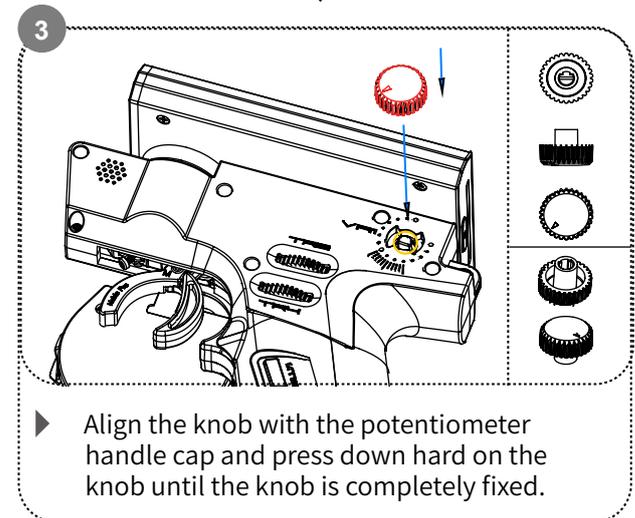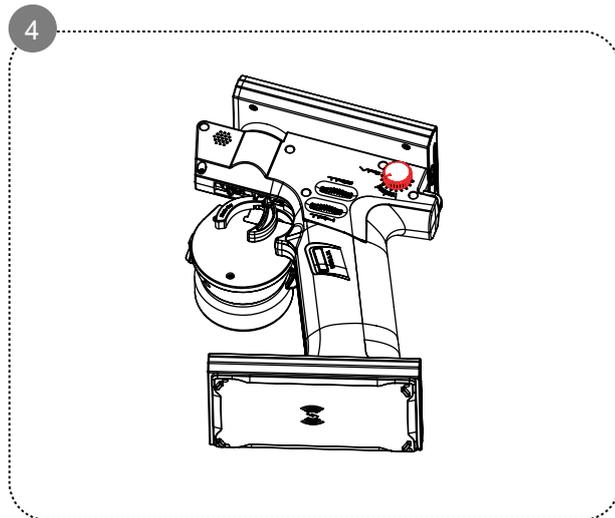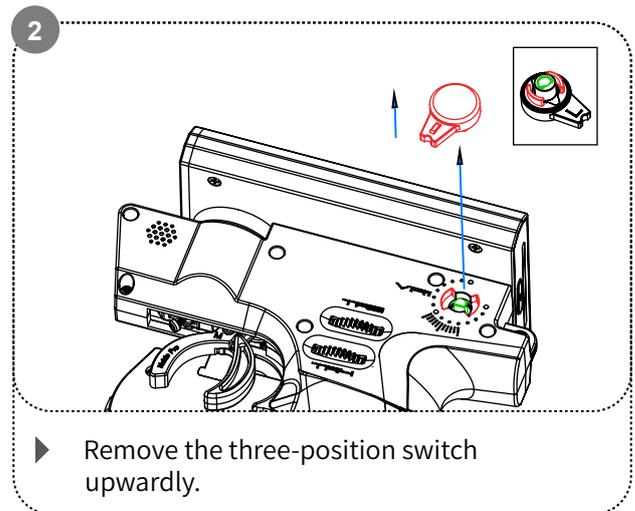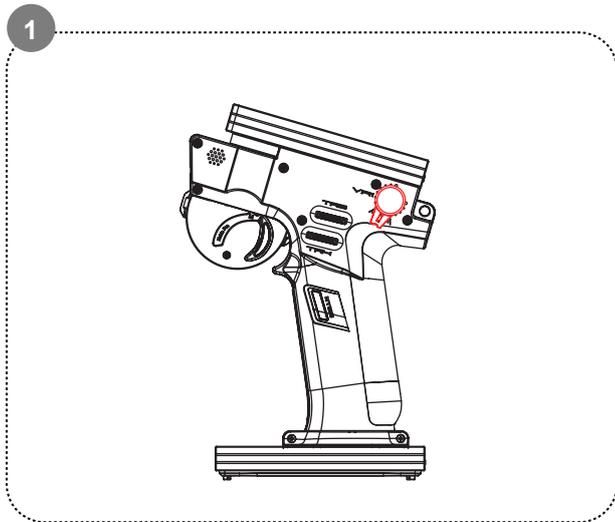
12. Certification

12.1 DoC Declaration

Hereby, [Flysky Technology co., ltd] declares that the Radio Equipment [Noble pro(Noble Pro] is in compliance with RED 2014/53/EU.

The full text of the EU DoC is available at the following internet address: www.flysky-cn.com

12.2 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

12.3 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

12.4 Appendix 1 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 televison 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, and

(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.　　　Move all your channels to the desired position.

2.　　　Select [All channels] and then [Yes] in the confirmation box.

www.flysky-cn.com

FCC ID: N4ZFG400