SM001

USER MANUAL

Contents

1.Introduction

This simulator includes 6-channel and 8-channel editions. It is compatible with FMS, XTR5.0, PhoenixRC, G7 and other simulator software. The simulator is also compatible with 32-bit or 64-bit XP, WIN10, and so on. It is adaptable to fixed-wing aircraft, helicopters, gliders and other models. The simulator supports gimbal assembly swapping. This simulator features good control precision of stick. By using this simulator, you can simulate the real control model operations and related function settings, and get familiar with some difficult operation practice of the model. As a result, you can experience the flying fun.

1.1 Simulator Overview

USB Cable

VRA Knob
CH6

SWB Switch
CH7

SWA Switch
CH5

SWC Switch
CH8

D1 LED

D2 LED

Left Gimbal Assembly

Right Gimbal Assembly

Left Five-way Button
Trim

Right Five-way Button
Trim
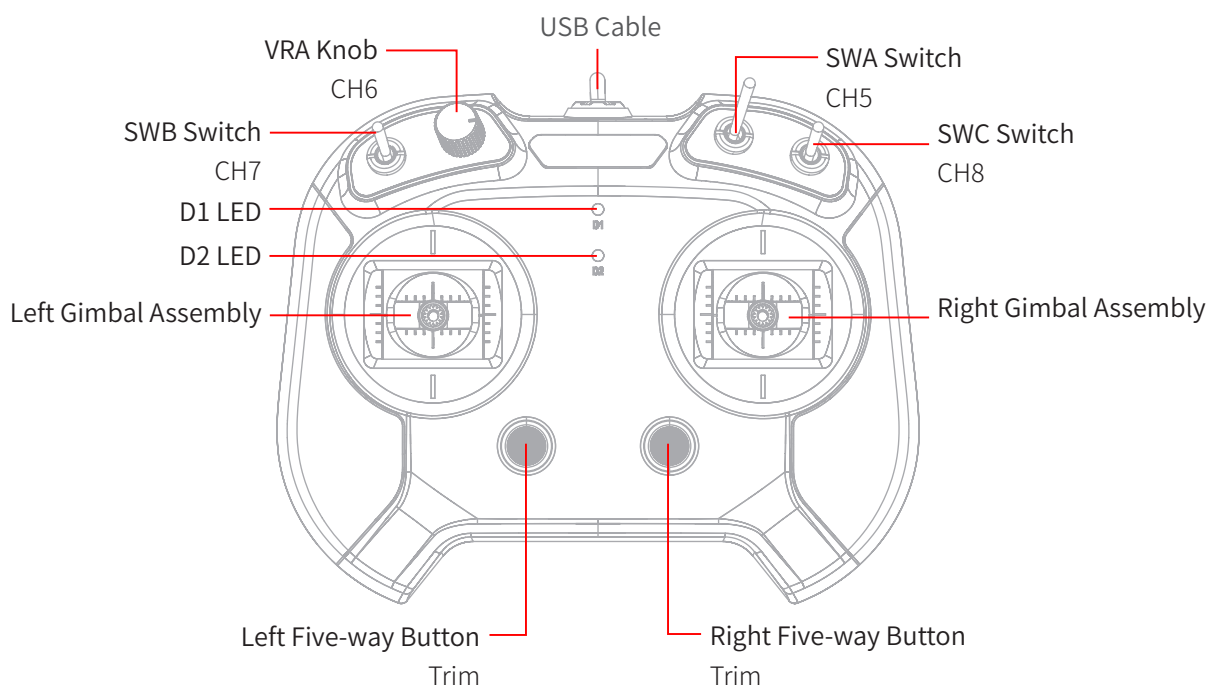
Note: The SWB and SWC switches are for the simulator which includes 8-channel.

2. Operation Guide

2.1 Turning On/Off the Simulator

Connect the USB cable of the simulator to the USB port of PC or laptop to power on the simulator. To power it off, unplug the USB cable.

### 2.2 Simulator LED Introduction

The red D1 LED indicates the communication status of the simulator. The green D2 LED indicates the function status of the simulator. The details are as follows:

LED Status		Simulator Status
D1 LED	Flash Rapidly	USB function is abnormal.
	Flash Slow	USB function is normal. PPM signal is normal.
	Solid On	USB function is normal. PPM signal is abnormal.
D2 LED	Flash Rapidly	Stick calibration
	One-flash-one-off	Gimbal assembly swapping state: Mode1 (Throttle is at the right gimbal.)
		Simulator software switching state: Reflex XTR (This is the default software.)
	Two-flash-one-off	Simulator software switching state: G3-G4.5
	Three-flash-one-off	Gimbal assemblyswapping state: Mode2 (Throttle is at the left gimbal.)
		Simulator software switching state: APD
	Four-flash-one-off	Simulator software switching state: PhoenixRC
	Solid On	Normal
	Flash Once Rapidly	The trim reaches the neutral position.
	Flash Rapidly For 3S	Reset the trims to neutral position.

2.3 Changing Stick Mode

This simulator supports two stick modes: Mode 1 and Mode2. These two modes are shown as follows:

Mode1:

Mode2:

Rudder   Aileron

Elevator   Throttle

Rudder   Aileron

Throttle   Elevator
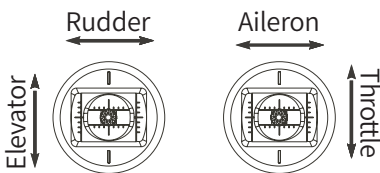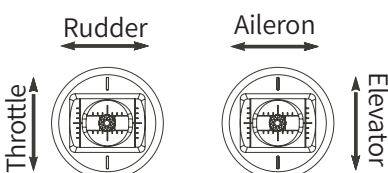
You can choose the stick mode according to your operating habits. To switch the stick mode, follow the steps below:

1. Press and hold the **Middle** button of the two trim buttons (**Five-way Button**) of the simulator and turn on the

simulator at the same time. At this time, the simulator enters the stick switching mode.

2. Press the **Middle** button of the left trim button (**Five-way Button**) to switch the throttle mode cyclically. Different LED states correspond to different throttle modes. See the LED status table.

3. Press the Middle button of the right trim button (**Five-way Button**) to exit the stick switching mode.

Note: By default, the throttle stick is non-self-centering. If you switch to the mode2 and want to keep the throttle stick as non-self-centering, then swap gimbal assembly. For details, see 2.4 Gimbal Assembly Swapping.
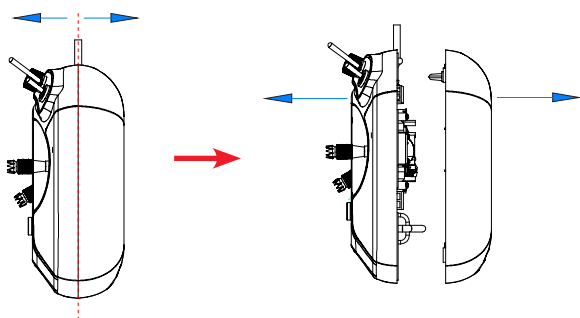
2.4 Gimbal Assembly Swapping

If the stick mode of the simulator has been switched to mode2, and the throttle stick needs to be non-self-centering. Then follow the steps below to swap the gimbal assemblies:
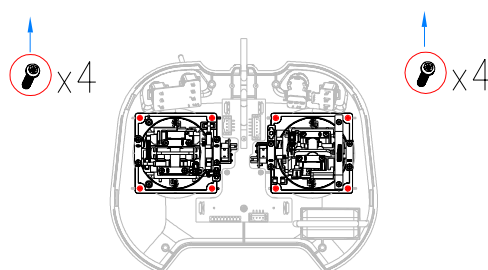
1. Unscrew the screws using a screwdriver.
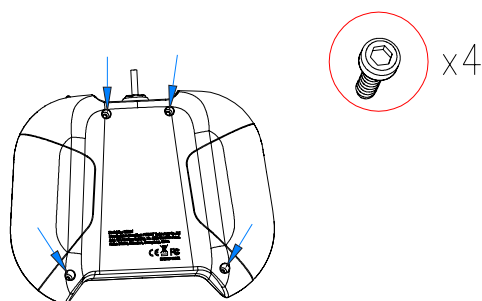
2. Carefully pry the front cover and back cover apart along the red line as shown in the figure.

3. Remove the screws marked in red as shown using a screwdriver.

4. Switch the gimbals to the oppsite side and make sure the gimbals have been rotated 180 degrees, then tighten the srcews removed before.
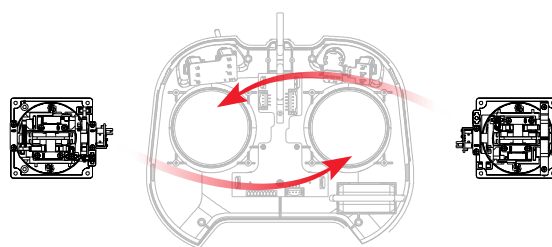
5. Reattach the front cover and back cover, and tighten the screws.

Notes:
1. Do not unplug any cable during the operating process.
2. If you swap between the left and right gimbal assemblies only without switching the stick mode, the both trim buttons remain the factory settings, namely keep unchanged.
3. If you want the left and right gimbals both to be self-centering, please contact the local dealer to perchase related accessories, by default, there is only one self-centering gimbal.

2.5 Trim

The up, down, left and right buttons for the left and right trims can be used to adjust the trim value of aileron, elevation, throttle, and rudder. The trim step is 5 us within a range of -120 us to 120 us. The D2 LED flashes quickly once when the trim value is adjusted to the Neutral position.

- By default, for the left trim, the up and down buttons are used to adjust the throttle, and the left and right buttons are used to adjust the rudder; and for the right trim, the up and down buttons are used to adjust the elevation, and the left and right buttons are used to adjust the aileron. The corresponding stick mode is left-hand throttle.

- When the stick mode is switched to the right-hand throttle with the left and right gimbal assemblies exchanged, for the left trim, the up and down buttons are used to adjust the elevation, the left and right buttons are used to adjust the rudder; and for the right trim, the up and down buttons are used to adjust the throttle, and the left and right buttons are used to adjust the aileron.

- If you swap between the left and right gimbal assemblies only without switching thestick mode, the both trim buttons remain the factory settings, namely keep unchanged.

2.6 Stick Calibration

To calibrate the four channels of Throttle, Rudder, Aileron and Elevator of the simulator, follow the steps below to enter the calibration mode:

1. Hold the two sticks at the bottom left corner and turn on the simulator at the same time. At this time, the simulator enters the calibration mode. The D2 LED flashes rapidly.

2. Turn the left and right sticks to the maximum and minimum travel points according to the upward, downward, left, and right directions.

3. Put the left and right sticks at the neutral positions, then press the Middle button of the left or right trim button (Five-way Button) to exit. If the calibration is successful, the D2 LED will be solid on. If the calibration fails, the D2 LED will flash quickly.

2.7 Trim Reset

Used to reset the trims to neutral position, follow the step below:

- Press and hold the Middle button of the left trim button (Five-way Button), at the same time power on the simulator. As a result, reset the trims to neutral position. When the reset is successful, the D2 LED will flash fast for 3S.

2.8 Switching Simulator Compatible Software

To select the compatible simulation software of the simulator, follow the steps below:

1. Hold the left stick at the bottom left corner and turn on the simulator at the same time.The simulator enters the software switching mode. Software varies with the states of the D2 LED. For details, see the LED status table. The default software is Reflex XTR.

2. Press the Middle button of the left trim button (Five-way Button) cyclically to switch the simulator software.

3. Press the Middle button of the right trim button (Five-way Button) to exit the simulator software switching mode.

Notes:

1. The product does not include CD, you can download the simulation software from the Internet, some software may pay for download;

2. Simulation software download link are as below, for your reference.
    - PhoenixRC：http://www.fw450.com/simulator-tutorial/
    - Reflex XTR：https://www.reflex-sim.net/download
    - Aerofly：https://www.aerofly.com/

3. Specifications

This section contains SM001 simulator specifications.

Product Model	SM001
Compatible Simulation Software	APD, Aerofly, Reflex XTR 5.0, G3/G3.5/G4/G5/G6/ G7, PhoenixRC 2.0/3.0S/4.0M/5, FMS, etc.
Compatible Models	Helicopters, fixed-wing aircraft, gliders, 3D special aircraft, racing drones, etc.
Number of Channels	6(8)
Compatible Operating System	XP, WIN7, WIN8, WIN10, WIN11 32-bit and 64-bit OS (desktop or laptop)
Input Power	4~5.5V/DC(Power supply directly through the USB cable)
Working Current	26mA/5V
Data Output	USB
Dimensions	166.8*132.7*66.3mm
Online Update	No
Length of USB cable	1.2m
Gimbals Assembly Swapping	Yes
Trim Adjustment	Yes
Stick Calibration	Yes
Temperature Range	-10°C ~ +60°C
Humidity Range	20% ~ 95%
Weight	About 250g
Certifications	CE, FCC, UKCA

4. Certifications

4.1 DoC Declaration

We declare that this device is in compliance with the essential repuirements and other relevant provisions of Directive 2014/30/EU.

4.2 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.

4.3 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

4.4 UKCA Compliance Statement

Satisfies all the technical regulations applicable to the product within the scope of UK Radio Equipment Regulations (SI 2017/1206); UK Electrical Equipment (Safety) Regulations (SI 2016/1101); and UK Electromagnetic Compatibility Regulations (SI 2016/1091).

Figures and illustrations in this manual are provided for reference only and may differ from actual product appearance. Product design and specificatiions may be changed without notice.

UK CA ☒ CE FC

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