# **INSTRUCTION MANUAL**OPT-010 Optical Tachometer



Thank you for purchasing SkyRC Optical Tachometer (SK-500010). Please read this entire operating manual completely and attentively as it contains important information.

It is a must have tool for any pilot, and can measure RPM of any rotating object, such as all kinds of helicopters, fixed-wing airplanes with propellers and multi-copters. With high accuracy, fast response, compact size, ergonomic design and easy operation, this Optical Tachometer makes pilots have more fun!

## Working Principle of Optical Tachometer

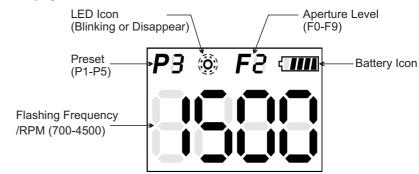
As we know when the flashing frequency of 3D Glass Screen is the same as the RPM of a rotating object, if we view the rotating object through the 3D Glass Screen, the rotating object is "static". At this time, the flashing frequency of 3D Glass Screen is the RPM of this rotating object. That is the working principle of this Optical Tachometer.



#### OPERATION

	Function	Description		
LED Key	Tachometer ON	Press it to turn on the Tachometer. (Note: It will be OFF automatically after no operation for 30 seconds.)		
	LED Indicator ON/OFF	It will blinking when the Tachometer is ON.		
F Key	Aperture Adjustment	10 levels and change F0-F1-F2-F3-F4-F5-F6-F7 -F8-F9-F0		
P Key	Preset Selection	5 presets and change P1-P2-P3-P4-P5-P1		
Rotary Dial	Flashing Frequency /RPM Adjustment	Move forward or backward to increase or decrease the valve (700-4500RPM)		

### **LCD Display**



#### 3D Glass Screen

It is regarded as viewing window which you can look through to observe the state of the rotating object.

#### **LED Indicator**

The flashing frequency of the LED indicator is the same as the 3D Glass Screen.

When the LED indicator is ON, the LED icon in LCD display will be blinking and when it is OFF, the LED icon will disappear.

## APPLICATION

- 1. Open the battery case cover and install the battery(CR2032) if necessary.
- 2. Press LED key to turn on the Optical Tachometer.
- 3. Choose the aperture level and the preset flashing frequency
- 4. Look the observing object through the 3D Glass Screen, roll the rotary dial to increase/decrease the flashing frequency, when you find the observing object is "static", read the flashing frequency value in the LCD display. The flashing frequency value you read is the RPM of the observing object.
- 5. The Optical Tachometer will shut off automatically after no operation for 30 seconds and the aperture level and flash frequency will be saved as preset.

#### Note 1 Factory default preset

Preset	P1	P2	P3 (Default)	P4	P5
Flashing Frequency /RPM	700	1600	2500	3400	4500
Aperture Level	F3	F4	F5	F6	F7

When you turn on the Optical Tachometer for the first time, it will enter Preset 3 automatically. You could change the Preset value according to your request.

Note 2 When you don't have rough idea about the RPM of some objects, it is better to start from low flashing frequency. Because when the RPM of the observing object is integral multiple, such as 700 and 1400, you will find it "static" looking through 3D Glass whether the flashing frequency is 700, 1400, 2100 or other integral multiple. In this case, you may get exaggerated RPM if you start from high flashing frequency.

# **FEATURES**

- Compact size
- LCD display
- High accuracy and the deviation is +/-1RMP
- Easy operation with rotary dial adjusting RPM
- Shut off automatically after no operation for 30 seconds
- Measure remotely and non-contact
- 5 presets of Flashing Frequency/RPM
- 10 Level aperture adjustment
- Applied for all kinds of helicopters, fixed-wing airplanes with propellers and multi-copters

# SPECIFICATIONS

- RPM Range: 700-4500RPM
- Accuracy: ±1RPM
- 10 level aperture adjustment
- 5 preset RPM value

- Rotary dial for RPM value adjustment
- LCD display
- Power supply: CR2032 button battery
- Weight: 45g

#### SAFETY NOTE AND CAUTION

Never measure RPM by yourself while you are controlling a helicopter or airplane, you need someone to help you, otherwise it will be dangerous.

#### WARRANTY AND SERVICE

We guarantee this product to be free of manufacturing and assembly defects for a period of one year from the time of purchase. The warranty only applies to material or operational defects, which are present at the time of purchase. During that period, we will repair or replace free of service charge for products deemed defective due to those causes.

You will be required to produce proof of purchase (invoice or receipt). This warranty is not valid for any damage or subsequent damage arising as a result of misuse, modification or as a result of failure to observe the procedures outlined in this manual.



Manufactured by **SKYRC TECHNOLOGY CO., LTD.** www.skyrc.com