SKYZONE

SKY02O
OLED FPV Goggle USER MANUAL
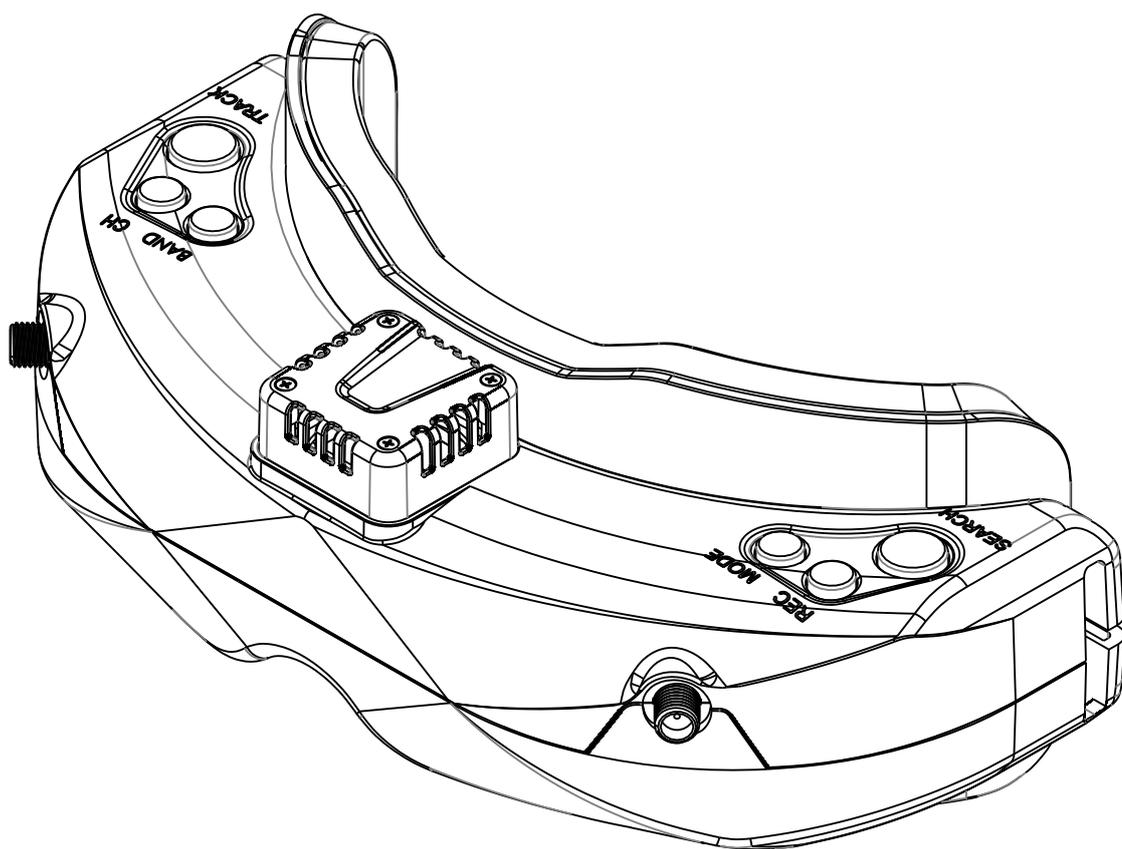
Specifications

| Specifications	
SKY02O	
Screen	OLED
Resolution	640X400
FOV（Diagonal）	29°
Interpupillary distance (IPD)	59–69mm
Receiver	Build in SteadyView Receiver
Language	Chinese/English
Power Supply	DC 6.5–25.2V
Power Consumption	500mA at 12V
DVR	MJPEG, 30fps, AVI, SD Card support up to 64Gb
Head Tracker	3–axis Accelerometer, 3–axis gyroscope
Dimentions	167*70*79mm
Weight	210g

BAND/CHANNEL table

BAND/CH table								
BAND/CH	CH 1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
A	5865M	5845M	5825M	5805M	5785M	5765M	5745M	5725M
B	5733M	5752M	5771M	5790M	5809M	5828M	5847M	5866M
E	5705M	5685M	5665M	5645M	5885M	5905M	5925M	5945M
F	5740M	5760M	5780M	5800M	5820M	5840M	5860M	5880M
R	5658M	5695M	5732M	5769M	5806M	5843M	5880M	5917M
L	5362M	5399M	5436M	5473M	5510M	5547M	5584M	5621M
Sensitivity	–98dBm±1dBm							
Antenna port	2 X SMA–K,50ohm							

Package Included

1.   Goggles*1
2.   Zipper case*1
3.   Antenna*2   (Patch and Ommi)
4.   Sponge with velcro*1
5.   Power cable*1
6.   Headtracker cable*2（JR and FUTABA)
7.   Video/Audio Cable*1
8.   User Manual*1

Diagram

REC MODE

BAND CH

SEARCH

IPD   IPD

TRACK OUT

CE FC

HDMI

AV IN

USB
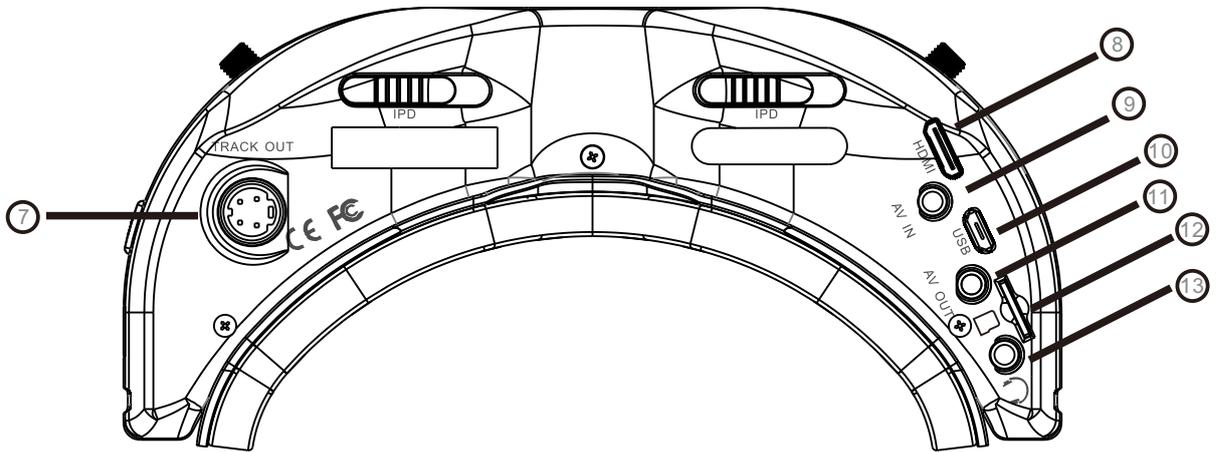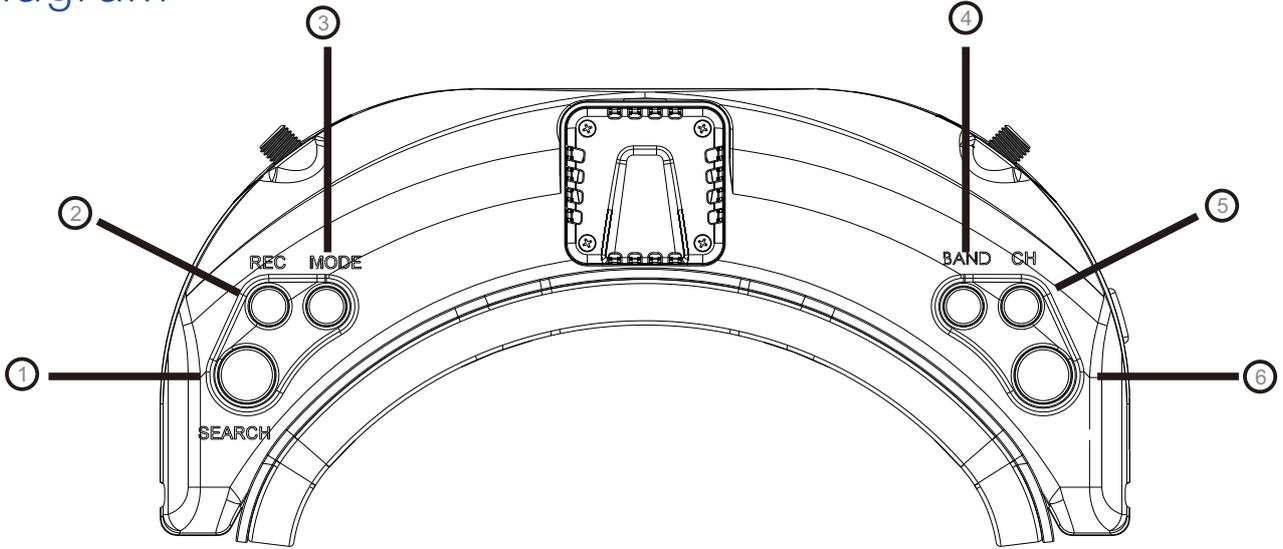
AV OUT

1.Search/Diversity and Mix swich   2.Record/OK
3.Mode/Back   4.BAND/UP
5.CHANNEL/DOWN   6.Menu/Headtracker/Delet
7.Head tracker port   8.HDMI input
9.AV input   10.USB Port
11. AV output   12.SD card slot
13.Earphone jack

Introduction

The SKY02O is upgrade version of classic SKY02 series, with 640*400 high OLED screen have vivid color and high contrast ration, pilot can see more details in the racing .
With steadyview receiver , the receiver merge two signals to one, avoid image tearing and rolling, make image more stable and clear in challenging condition.
The new user interface have better logic, user easy to navigate in the menu.
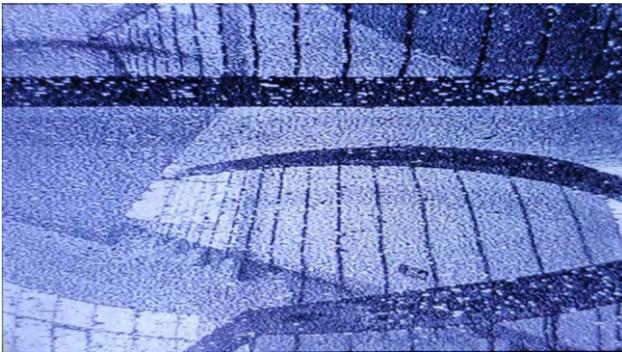

Diversity
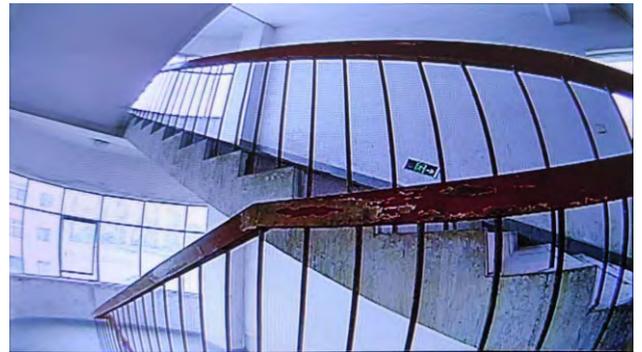
SteadyView

⚠ DO NOT EXPOSE THE LENS DIRECT TO SUNLIGHT, OTHERWISE THE SCREEN WILL BURN IN.

Quick Start Guide

1.Install the antenna and faceplate.
2.Use power cable to connect battery and the goggles, Goggles can power by 2~6cell lipo battery, hold the power button to turn on.
3.Insert diopters if needed.
4.IPD adjustment: move the IPD slider until there is no double vision of the image.

Band and Channel setting

Frequency	**5800** MHz
Band	F/Airwave
Channel	12345678
RSSI	
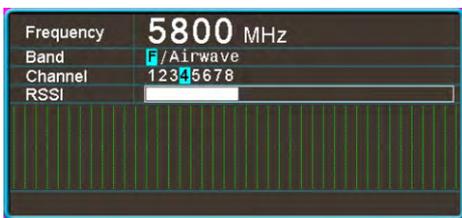
1.Press the Band button to change the Band. The osd bar will show band and channel.

2.Then press the Channel button to change the channel.

3.Hold the search button to pop up search menu, press the Search button again to start search, after searching all the frequency, receiver will work on the strongest signal. Use rec and Mode button manually select the channel, hold the search button to quit search.

! Sometime the auto search channel is not accurate, user may need manually select the channel.

Diversity and Mix switch
Some camera didnt fllow standard PAL and NTSC, which make the receiver confusing in mix mode, caused the rolling image. Short press the Search button to switch to diversity mode to solve the rollling image issue.

Volume Setting
·In all mode preview mode, hold Band and Channel button to adjust the volume.
·Volume setting is only effective on earbud. Not effective on AV OUT volume.
·System didn't save the volume setting, in case of the volume is too high in AVIN or RF mode.

MODE MENU

Mode menu
- RF Normal
- RF Racing
- AV Input
- HDMI Input
- ▶ Playback
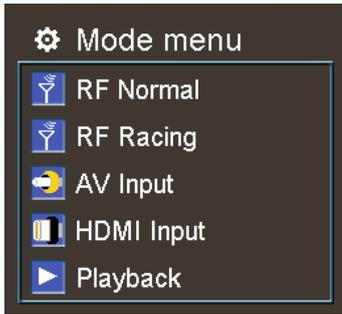
·Press the Mode to pop up mode menu. press again to quit menu.

·Use CH and BAND button to navigate, Rec button to select.

·RF normal: this mode is normal 48 CH receiver mode.

·RF Racing: this mode will make receiver only work on RaceBand.

·AV Input: When enable the AV IN mode . The NTSC and PAL system format can be supported to be automatically switched. The receiver module will be automatically turned off to save the power.

·HDMI Input: the receiver module and the video recording module will be automatically turned off to save the power.

·Playback: in this mode, customer can review the DVR files.

PLAYBACK

· In playback mode, use Band and Channel button to choose files, press Rec button to play and pause.

· When playing the DVR, press Band and Channel button to fast forward or fast backward.

· Press the Mode button to quit play mode .

· Press the Menu button to delete DVR, use Rec button to confirm.

Settings

Settings
- Head Tracking
- Image
- DVR
- Display
- System
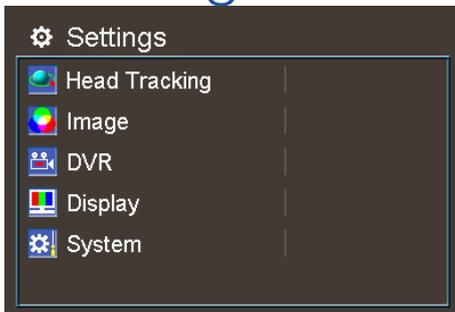
·Short press Menu button to pop up system menu. press Mode button quit menu.

·Use CH and BAND to navigate, press the rec to confirm, mode to quit.

Head Tracking

Head tracking
- PPM Channel
- Pan Tracking range
- Tilt Tracking range
- Pan Correction
- Tilt Correction
- PPM Reverse
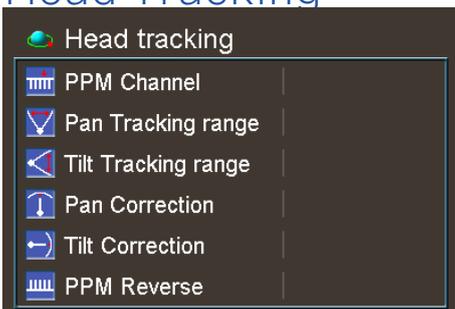
·The head tracking reset button is menu button, hold menu button to reset the gyro.

·The gyro required for an initialization time. When it is powered on, goggles must be kept horizontal

and stable as long as possible. When hearing the sound of a "beep", the initialization is done.
・Hold menu button to reset the PPM signal to the center, goggles will beep when press the button.
・In menu, you may set PPM channels .
・Pan Tracking range: 180° (90° for left and right respectively), 120° (60° for left and right respectively), 90° (45° for left and right respectively), 90° as default.
・Tilt Tracking range: (60° for left and right respectively), 90°(45° for left and right respectively), 60°(30° for left and right respectively), 90° as default.
・Pan Correction: Via such setup, you may separately compensate the central deviation of Pan. You may set it at 0~10 levels, and the actual compensation angle is related to the turning angle of the cradle head.
・Tilt Correction: Via such setup, you may separately compensate the central deviation of Tilt. You may set it at 0~10 levels, and the actual compensation angle is related to the turning angle of the cradle head.
PPM Reverse: <Normal> as default setup, <Pan> as the reverse of such channel, <Tilt> as the reverse of such channel，<Pan & Tilt> reverse in two directions.

Image

In image setting menu, customer have standard, bright, vivid, soft and 3 customized Files to select, Customer can adjust Brightness, Contrast, Saturation, Hue and Sharpness to suit different environment . in 3 user 1/2/3, the image setting can not change in 4 pre-set files.

DVR
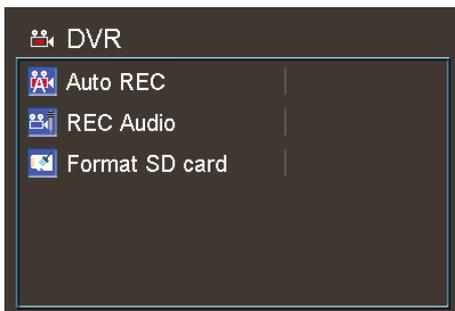
・AUTO Record, the DVR will auto record when goggles get image signal.
・Rec Audio, some VTX have micphone, enable the function can record the audio.
・Format SD card, SD card need format to FAT32 to recording, make sure backup the DVR. .
if the card is less than 0.5GB, DVR stop recording videos.

Display
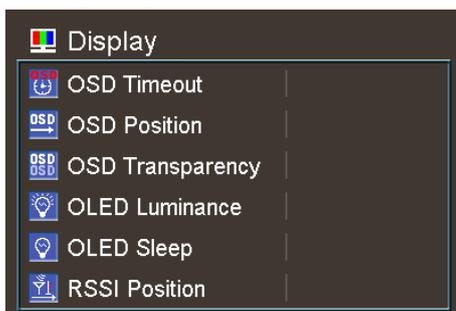
・In Display setting menu, customer can set the topbar OSD time, turn off the time off, the OSD always on.
・The Luminance of the OLED screen and be adjust in the menu (8 stage, default is 5).Normally do not
    set the brightness too high unless the image is dim. Due to the OLED's characteristic, excessive

brightness may cause a slight brightness drop in screen.
· OLED Sleep MODE: To prevent OLED burn out, the goggles have OLED sleep mode, The sleep mode can be set in the menu(1minute 3minutes 5 minutes, default 3 minutes.) When sleep mode is enabled the goggles will detect the movement of the goggles (via headtracker gyro), when the goggles stay still to the preset time , the buzzer will beep , after 10 seconds, the goggles will switch to sleep mode , the oled screen will turn off, move the goggles to quit OLED sleep mode.
· When OLED sleep mode is triggered, the rest functions of goggle is still working (receiver ,DVR etc).
· OLED Screensaver:image will move 1pixel/10s, flow the order: middle→right→middle→left→middle, circulating. this function can't turn off.

> ⚠ To quit OLED Sleep mode: Move the goggles when hearing beep.

SYSTEM

⚙ System	
🔋 Power supply	
Ⅴ Voltage Calibration	
🌐 Language	
⚙ Fan speed	
🔄 RX FW upgrade	
↩ Factory settings	
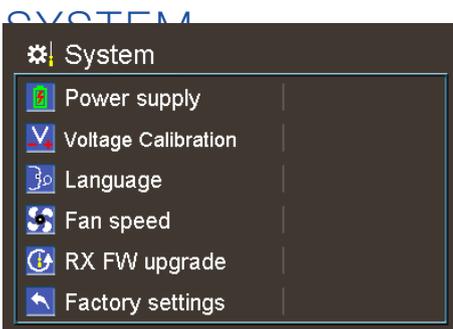
· Power supply , user can choose battery type(2S~6S) to make sure goggles shown real capacity of the battery
· Voltage calibration gives user ±0.9V range to adjust the voltage, when calibrate the voltage, use multimeter to measure the loaded voltage of the battery, then use shuttle wheel to adjust voltage.
· System Language can select in to: English,Chinese.
· The speed of fan can be set in the system menu, press the POWER button to start up/stop the fan.
· RX FW upgrade:User can upgrade Receiver Firmware from SD card in this menu.
· Factory settings : User can reset all the functions and settings in this menu.

Firmware Update

Goggles

1,Connect goggles to the computer. Connect goggles with battery.
2,Hold the mode button then turn on the goggles, release the mode button, computer will automatically install the driver , computer will show a new removable storage .
3, Copy the goggles firmware to storage. goggles will installing the update at the same time. When the copying is done, the firmware upgrade is done.

Receiver Firmware

1, Power on the goggles, Connect goggles to the computer by usb.
2,Go to system menu, select RX firmware update.
3,computer will show a new removable storage ,Copy the goggles firmware to storage. goggles will installing the update at the same time. When the copying is done, the firmware upgrade is done.

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