

SKYZONE

**SKY02
3D FPV GOGGLE
USER MANUAL**

System Content



FPV GOGGLES



Carry Case



SKY201 Transmitter



SKY301 Camera



5.8G 2dBi antenna X 4



Futaba data cable



JR data cable



WFLY data cable



AV cable



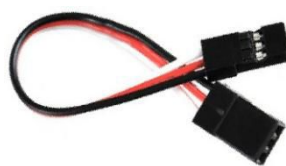
Power cable



2P TX Power cable

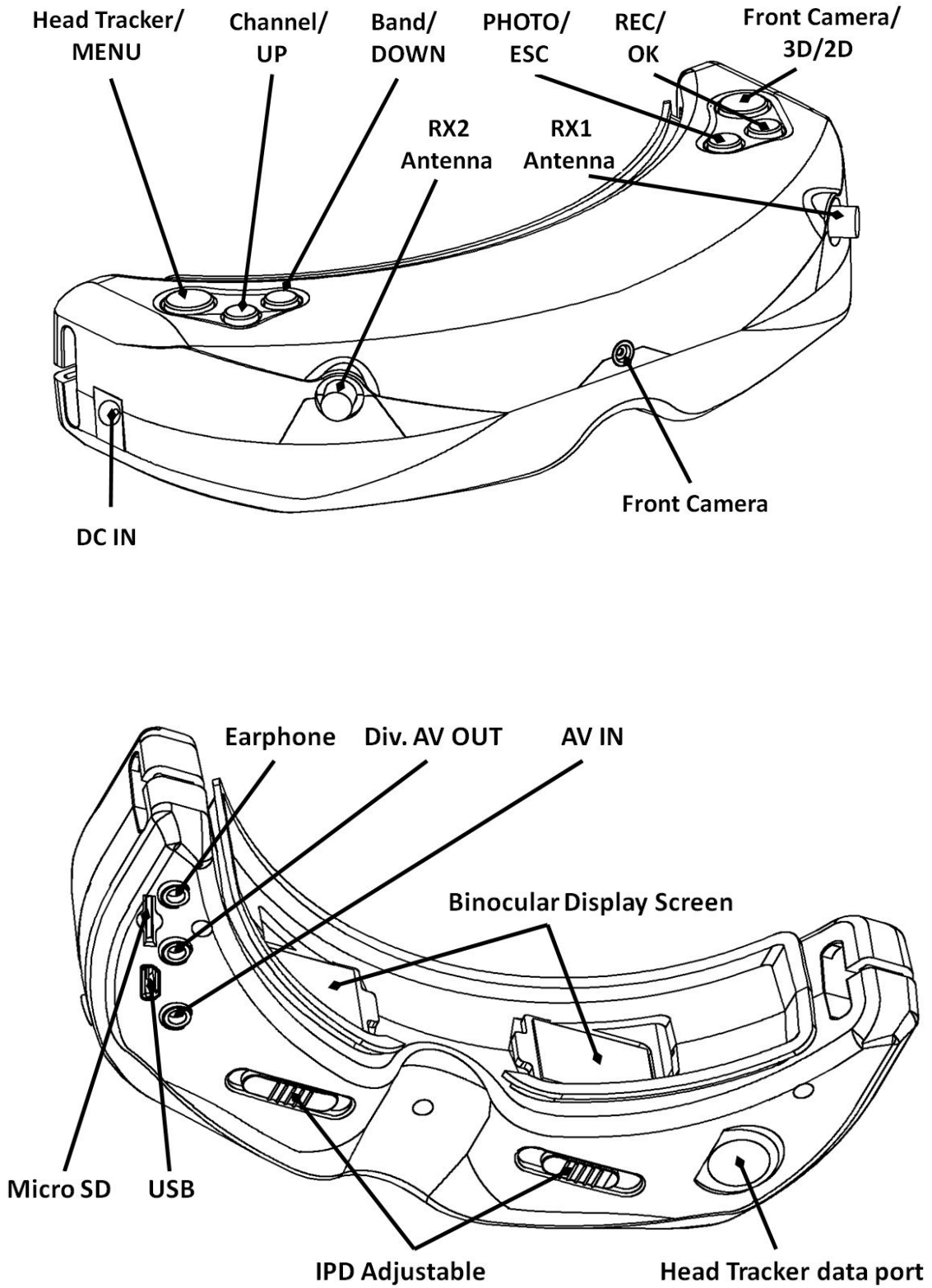


6P Camera cable



3P TX Remote control cable

Function Diagram



Operation Instruction

The new Skyzone 3D FPV Goggles are flat out the most advanced and feature rich FPV goggles on the market. The High resolution wide screen matched with a 30 degree field of view puts you in the cockpit, the new included 3D camera and match special 600mW VTX works with the dual receivers built-in to the goggles to give you a true seamless 3D FPV experience. Blend that with the state of the art auto centering head-tracker and you have a true immersion like you have never seen.

Skyzone has matched the beautiful FPV view with reliability and adjustability, from the built-in 32 channel dual diversity 5.8GHz receiver to the IPD and Diopter adjustments. The goggles have full A/V ins and outs and now a built in DVR with playback. Heck, you can even watch a movie with them! The goggles have a front mounted camera, with a quick push of a button your view switches allowing you to perform all kinds of tasks without the need to lift the goggles. The goggles also feature light tight comfortable eye cups and an earphone jack with volume control.

The quality and features of the new Skyzone FPV Goggles have definitely raised the bar, so if you're ready for some seat of your pants true 3D flying from the cockpit view, look at these Skyzone goggles.

Quick Start Guide

Preparation:

- Install the lens, lens hood, antennas and the TF card
- Connect the camera and transmitter and then power the transmitter and FPV goggles
- Short press <UP/DOWN> button on setup the same channel to the transmitter to view the image.
- Pull the IPD Adjuster to adjust the inter-pupillary distance.

Buttons:

TRACK Button:

- Short press the Track button to reset the Head Tracker in the normal mode
- Long press MENU button 3 seconds to enter MENU setup
- Switch between the 4 main menu with this button in MENU setup

CHANNEL Button:

- Short press to add channel in 3D RF mode
- Short press to in 2D RF mode, multiple press for loop adjustment
- Long press 3 seconds to turn up the volume in 3D RF, 2D RF, AV IN, PLAYBACK mode
- It's up button in MENU setup

BAND Button:

- Short press to reduce channel in 3D RF mode
- Short press to adjust the band in 2D RF Mode, multiple press for loop adjustment
- Long press 3 seconds to turn down the volume in 3D RF, 2D RF, AV IN, PLAYBACK mode
- It's down button in MENU setup

REC Button:

- Short press to start recording and press again to stop in 3D RF, 2D RF, AV IN mode
- It's OK button in MENU setup

PHOTO Button:

- Short press to capture in 3D RF, 2D RF and AV IN playback Mode
- It's ESC button in Menu setup

CAMERA Button:

- Short press to switch to Front Camera mode in any mode
- Long press 3 seconds to fast switch to 2D from 3D RF Mode

RF mode

3D mode

- 3D mode in RF mode, and will be in 2D in all other modes.
- Press up/down button to adjust the 4 default channels. And it is also OK to custom the RF Band to select the proper band and channels. (Caution: there will be interference if select frequency too close. The recommended frequency interval is 40MHz)
- Long press <CAMERA> button to fast switch to 2D mode, (it can greatly improve the display under a severe disturbance environment) . Under this mode, the wireless channel will not be changed. It is different from the 2D mode after turn off 3D mode. Its default signal source is RX1 channel, this can be changed in the MENU.

2D mode

- They will work in diversity mode if close the 3D mode in the menu. And the setup in 3D mode will not work.
- Press <CHANNEL> button to select channels, and <BAND> for band, multiple press to cycle.

Front Camera

- The Front Camera is Wide-Angle Camera with 680X480 (VGA) Resolution and good low Illumination. It's very convenient to view around without taking off the Goggles.
- Press "Camera" button to open the Front Camera.
- The Front Camera can neither be recorded nor display via AV OUT but for viewing around only. It's ok to open the Front Camera while recording.
- It's ok to setup the goggles with the Front camera turning on



Image adjustment

- It's ok to adjust the Brightness, Contrast, Saturation, Hue, Sharpness Parameters in Image setup Menu
- Press REC/OK button to enter setup and press UP/DOWN to adjust, press ESC to exit
- It's recommended to adjust while the image is good.

Head Tracker

- Please keep the goggles in horizontal position and steady, initialization is ok when there is 1 beep. Or short press the <TRACK> button.
- short press the TRACK button with beep to setup the PPM to center.
- Setup PPM CHANNEL in the Menu : CH5-CH6, CH5-CH7, CH5-CH8, CH6-CH7, CH6-CH8, CH7-CH8。
- Pan Tracking range : 180degree (L90/R90) , 120degree (L60/R60) , 90degree (L45/R45) , Default 90degree
- Tilt Tracking range : 120degree (UP60/DOWN60) , 90degree (UP45/DOWN45) , 60degree (UP30/DOWN) , Default 90degree
- Pan Correction : setup for compensating Pan center offset, 0~10 levels, actual angles refers to rotation angle of the cradle head
- Tilt Correction : setup for compensating Tilt center offset, 0~10 levels, actual angles refers to rotation angle of the cradle head

Recording

- Please format the TF card firstly before record
- Recording is either ok in RF Mode or AV in Mode. Screen displays  and <memory card info.>, Press <REC> button to start record, and  in red with recording time displayed

- Press <PHOTO> to capture in preview mode with click (not ok while recording)
- There is both video and audio in default. It is ok to turn off audio in the system menu to record video only.
- It is also ok to turn off the video record to save power.

Playback

Button functions in playback:

- **Long press <REC> to enter playback in RF or AVIN mode.** (Please don't connect the AV cable in playback mode)
- REC <PLAY/PAUSE/OK>
- PHOTO <STOP/BACK>
- BAND <PREVIOUS /BACKWARD >
- CHANNEL <NEXT/FORWARD >
- TRACK <DELETE>
- Videos and photos are previewed directly in playback mode, the last 4 number of the file displayed in top right corner and duration time for video clips.
- PRESS CHANNEL BUTTON for 2X, 4X, 8X quick play, and press REC back to normal speed. Press PHOTO button back to preview or play again or other actions.
- Press TRACK button to delete the file and press REC to confirm.
- The files captured from other devices may not be played properly.

AV input

- The goggles support AV IN. The wireless model will close when the AV IN is connected to save power.
- Please plug off the AV IN cable if playback, and don't plug in while playing otherwise it will exit automatically.

AV output

- AV Out is the diversity Video and Audio output
- Earphone port is audio output for connecting earphones, Each boot is automatically set to the lowest volume to avoid sudden loud boot

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
Format SD card








- Format SD card and press <OK> to enter setup, press <UP/DOWN> and select < YES>, press <OK> again to format
- Caution: all files will be deleted, please operate sincerely.

Factory settings

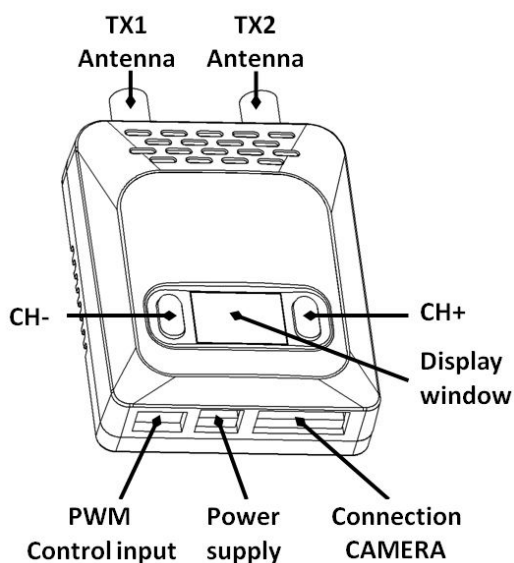
- Enter system menu and select Factory settings, press <OK> to setup, press <UP/DOWN> and select < YES>, and the press <OK> to setup to factory default setting.

Screen OSD Overview

-  Recording : Red while recording, Red  while record module is closed, SD card is full or SD CARD error.
-  Photo: Press <PHOTO> button once in video preview,  red once indicates one photo is captured.
-  Memory card: normal with, capacity with GMB (1000MB) and red when memory is full.
- Mode: RF mode, AV IN mode, PLAYBACK mode
-  Mode: Enabled only in RF MODE

-  Mode: Displayed when enable Fast 2D in 3D mode and also indicated the signal source from RX1 or RX2.
-  Mode: Displayed when close 3D mode or in AV IN, PLAYBACK, FRONT CAMER Mode.
-  Mode: Displayed when connected to PC. It is ok to manage the memory card
-  PLAY/PAUSE
-  BACKWARD /FORWARD
- POWER: DC IN power, screen displays <DC IN>, Power by battery, it is ok to select from 2S, 3S, 4S, 5S, 6S, and displayed on the screen,  indicates full power,  indicates low power
- CHANNEL: Displayed in 3D Mode. When enable Custom mode in 3D mode, Band and Channeled of RX1/RX2 will also displayed . Displayed BAND and CH in 2D Mode

Transmitter Operation Instruction



- Please make sure the antenna and transmitter are compatible otherwise the transmitter maybe damaged.
- Please place the transmitter in well-ventilated place and avoid to place in confined place or wrap the transmitter tightly.
- Please don't touch the antenna or the mental parts to avoid burning by the parts
- SKY201 has two digit LED display. It showed channels in default channel mode and LEFT for TX1 band and channel, RIGHT for TX2 band and channel in Custom channel mode.
- Press <CH->, <CH+> to adjust the channels, total 4 channels
- Long press <CH-> or <CH+> to enter Custom setup. The display will flash quickly and then Press <CH-,CH+> to setup band of TX1,TX2 separately. Long press <CH-,CH+> separately to ext Band setup. Short press <CH->or<CH+> to setup channels . Please press <CH->or<CH+> at the same time to switch from custom to default mode.
- It is also ok to control the channels of the transmitter through the PPM signal. To assign a Thirds switch in the remote control , C-H, to CH+, C-L to CH-. Connect 1PPM channel of the receiver to the S1 port of the SKY201 to control mother channels.
- Connect another PPM channel of receiver to S2 of SKY201 in custom mode. S1 for TX1 and S2 to TX2.

Specifications (SKY301)

FOV	85 degrees (Diagonal)
F/NO	F/NO=3.0
Resolution	720X576
Video Standard	PAL
Video output level	1.0Vp-p Typ. / 75ohm
Audio output level	2.0Vp-p Typ. / 10Kohm
Voltage	DC 5.0V/ 0.5A
Power	1.6w
Weight	g
Operating Temperature	0°C ~ +60°C

Specifications (SKY201)

Modulate		Wideband FM Modulate								
Video Standard		NTSC/PAL								
RF Output Impedance		50 ohm								
RF Output Power		Min.	Typ.		Max.		Units			
		26	27		28		dBm			
Wireless Transmitter	ISM 5.8GHz 32 Channel, Dual Transmitter.									
	Preset	CH 1		CH2		CH3			CH4	
	Frequency	5733M / 5771M		5752M / 5790M		5809M / 5847M			5828M / 5866M	
	Custom Frequency	Band	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		
Video input level		1.0Vp-p Typ. / 75ohm								
Video Band Width		8.0MHz								
Audio input level		2.0Vp-p Typ. / 10Kohm								
Audio carrier Frequency		6.5MHz								
Power supply		DC 7.0V~26V/ 1.5A								
Power Consumption		12V input: 7.5W								
Dimensions		59(L)X46(W)X16(H)mm (Not include prominent part)								
Weight		g								
Operating Temperature		0°C ~ +70°C								

Specifications (SKY02)

Binocular Display	FOV	30 degrees (Diagonal)									
	Resolution	854X480(WVGA), 1,229,760 color sub-pixels									
	Brightness	350cd/m ²									
	Interpupillary distance (IPD)	59-69mm Adjustable									
Wireless Receiver	ISM 5.8GHz 32 Channel, Diversity receiver.										
	Preset Frequency	CH 1		CH2			CH3		CH4		
		5733M / 5771M		5752M / 5790M			5809M / 5847M		5828M / 5866M		
	Custom Frequency	Band	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		
Sensitivity		-90dBm±1dBm									
Antenna port		2 X SMA,50ohm									
Front Camera	FOV	60 degrees (Diagonal)									
	Resolution	640X480(VGA)									
	FOCAL LENGTH	f=4.0mm									
	F/NO	F/NO=2.8									
Head Tracker	Sensor	Magnetic, Inertial and gyro									
	Output	PPM 8 channel, Optional 5-6CH,5-7CH,5-8CH,6-7CH,6-8CH,7-8CH									
Record	Micro SD	Support to 32GB									
	Compression	MJPEG, 30fps, AVI									
	Picture	JPEG									
	Record rate	6Mbps									
AV Signal	Video Standard	NTSC/PAL									
	Video output level	1.0Vp-p Typ. / 75ohm									
	Audio output level	1.0Vp-p Typ. / 10Kohm									
AV Port	Div. AV OUT(3.5mm4P)	Diversity Video, Audio output									
	EAR OUT(3.5mm3P)	Stereo 16Ω/150mW									
	AV IN(3.5mm4P)	Video, Audio input									
Power Supply	DC IN	DC 7~26V/ 1A									
	Power Consumption	12V input: 5.4W									
Dimensions		168(L)X92.5(W)X41(H)mm (Not include prominent part)									
Weight		g									
Operating Temperature		0℃~+60℃									