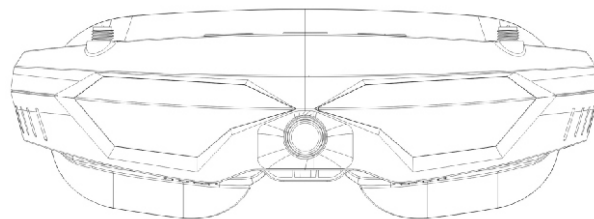




SpeXman Two

SPX02

5.8GHz FPV Diversity Goggles



Instruction manual

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
 - (1) This device may not cause harmful interference.
 - (2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE statement

The equipment is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC.

C € 2200

SpeXman Two

SPX02

5.8GHz FPV Diversity Goggles

Features

Unique Picture in Picture Function
Wide Angle Camera
High Sensitivity Multi-Channel Diversity Receivers
HDMI 1.3 Input, 100% Compatible with Phantom 3/4 and Inspire
Full Nexwave and Airwave Support
One Button Operation on Contrast & Brightness
Central Mark Helpful for Race Drone
Support Focus Assist & False Color
2S-6S Input (7-28v)
Adjustable Interpupillary Distance
Comfortable Multi-type Eye Cups
Micro Portable Battery switching between 7.4V & 12V
Cool Futuristic Design

Safety Notice

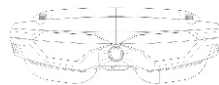
Warning

- Do not expose the lenses to direct sunlight. The lens will focus the sun's energy and damage the LCDs irreparably. This is not covered under warranty.
- Do not expose the SPX02 to water or moisture.
- Please use only the recommended accessories.
- Do not disassemble the product. There are no user serviceable parts inside.

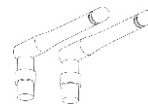
Caution

- Avoid magnetic fields - they may affect the performance of the device.
- Keep away from open fires.
- This device is not dust proof or waterproof.

Package Contents



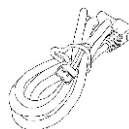
SpeXman Two SPX02



2 x 5.8G Antennas



2 x AV-Out Cables



**12V DC Cable with
BEC Plug**



Cable for Futaba RC



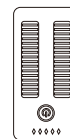
Cable for JR RC



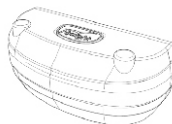
HDMI Cable



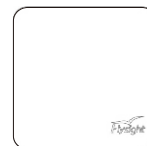
HDMI Connector



3S Battery



Goggles Case

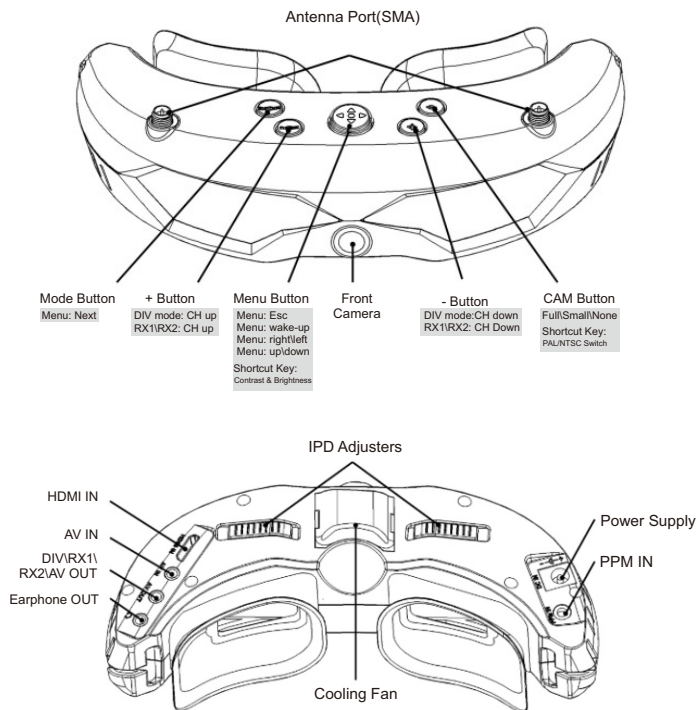


Cleaning Cloth



User Manual

Function Icons



Operation Instructions - Modes

- Press the <MODE> button to switch between DIV, RX1, RX2, AV IN, or HDMI IN modes.
- Under DIV or RX1, RX2 mode, you need enter <Menu> → DIV band, RX1 band, RX2 band to set up wireless receiving band, use the <Menu> left and right button to select the correct band, press <-> and <+> to select channel to match your transmitter.

DIV Mode

- Enter <Menu>→DIV band, press <Menu> button left and right to adjust bands. DIV mode is made of RF diversity receiving circuit by double antennas. You can press <-> and <+> to control the channel number.
- In this mode the goggles constantly compare the RSSI of ANT1 and ANT2, and then switch to the strongest signal.
- DIV AV OUT port outputs Diversity signal for your video recorder or external display.
- **DIV AV OUT only works in DIV mode.**

RX1, RX2 Mode

- Press <Menu> button to enter Menu→RX1 Band, RX2 Band, you can press <Menu> button left and right to adjust bands. Such is single RF module working.
- AV OUT port output DIV, RX1, RX2 signals for recorder, external use and so on.
- **AV OUT is only working under DIV, RX1, RX2 modes.**

AV IN Mode

- Enjoy your external video and audio signal by connecting through the AV Port.
- Wireless receivers are automatically turned off in this mode to save power.

HDMI IN Mode

- For a clearer image switch to HDMI input. The goggles will display a maximum input of 1920x1080/ 60Hz.

Operation Instructions - Menu Screens

- Wireless receivers are automatically turned off in this mode to save power.
- **Please note that you may experience a delay of up to 5 seconds before the function starts after selecting the HDMI mode.**

Earphone Port

- Output audio at DIV、RX1、RX2、AV IN、HDMI modes.

Front Facing Camera Function

- While in any of the Modes tap the <cam> button to enable the front facing camera function, this will switch the goggles to a small screen display of the feed from the forward facing camera. Tap <cam> again to a full screen, then tap <cam> again to return to the previous Mode.
- **Please note that you will lose PIP when getting the full screen switching to the front facing camera function.**

Main Menu and Navigation

- The battery volume icon is displayed on the top right side of the screen. When the mark is red and flashing, please charge it in time.
- Use the <Menu> button to move between the different icons, you can press <Menu> button up and down to choose function menu, you can also press <Menu> button left and right to adjust the value, after finishing setting, please press <MENU> button to quit.
- Shortcut key of Contrast & brightness: Without any menu showing, press <Menu> button left and right to reduce and increase contrast; press <Menu> button up and down to increase and reduce brightness.
- At any menu and state showing, if there is no pressing any button, the icons on screen will be off automatically.
- <Cam> button: Short press this button, you can change the front camera at full/small/line states; Long press this button, you can switch the TV system between PAL/NTSC easily.

Operation Instructions - Menu Screens

Volume

- Press <Menu> button to use the <menu> left and right button to reduce or increase the volume.
- When powered off previous settings will be saved.

Image

- You can shortcut key of <Menu> button or press <Menu> button to set up contrast and brightness to improve the video display quality.

PIP Function (Picture in Picture)

- To enable PIP select <cam > .
- The secondary image can be made smaller or larger by selecting Size. Cycle through the two sizes of 200x150, 320x240 pixels using the <menu> left and right button.
- The thirdly image can be moved by selecting Position. Toggle between the four positions by using the <menu> left and right buttons.
- Press the <cam> button to activate and deactivate the PIP on screen.

System Settings

> Battery

- Press <Menu> button to enter menu, you can choose DC in and 2S-6S battery types to make their volume icon showed on the top right side of the screen.

> Language

- Press <Menu> button to enter menu, you can select 8 kinds of different languages.

Operation Instructions - Menu Screens

> TV System

- Press <Menu> button to enter menu, find TV system to adjust PAL/NTSC.

> PPM Channel

- Select the channel for binding your RC transmitter to the goggles, you can then assign switch positions for activating/ deactivating PIP or the front facing camera.
- You need enter <menu> → PPM to set up any channel of CH NO.5.6.7.8.

> Central Mark

- Press <Menu> button to central Mark, help you get better image position.

> False Color

- Press <Menu> button to enter menu, false color can be intuitive observation and calculation in the scene lighting levels, make brightness or lighting value mapping for the display brightness of false color, from the darkest to the brightest, in turn display blue, cyan, green, yellow, orange and red.

> Focus Assist

- Press <Menu> button to enter menu, assist focus is used in obtain the sharpest possible picture. This feature is most effective when the subject is properly exposed and contains enough contrast to be processed.
- Peaking: Focus in red outline to display focus area visually, making object highlighted. It's available for focusing with DSLR and camcorder.

> Fan

- Press <Menu> button to enter menu, you can adjust the fan status: On/Off/ Auto.


> Menu

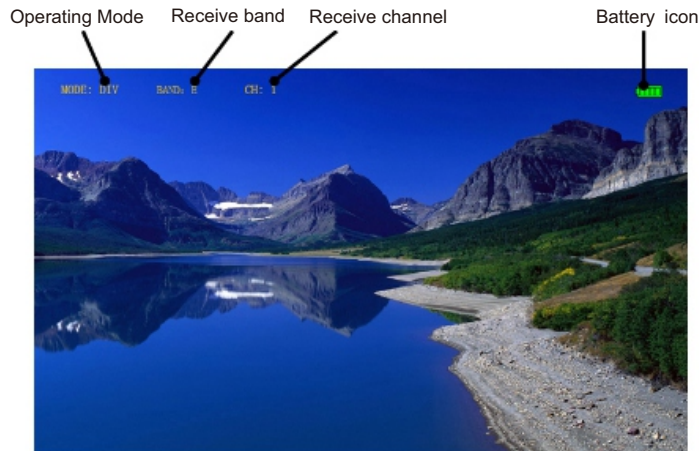
- Press <Menu> button to enter menu, return the goggles to factory default settings.

On-Screen Icons

Operating Temperature

⚠ When using the PIP function or HDMI input you can expect the unit to operate at a higher temperature. To avoid the equipment from overheating the fan on this unit will turn on automatically.

- Different work mode, different icon is displayed on the screen.
- When battery icon showing red bank as , it means low battery, please change battery.



Specification

| | | | | | | | | | | |
|---------------------|-------------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Display | FOV | 30 degrees (Diagonal) | | | | | | | | |
| | Resolution | 854X480(WVGA) | | | | | | | | |
| | Luminance | 350cd/m ² | | | | | | | | |
| | Interpupillary distance (IPD) | 59.5—69.5mm(adjustable) | | | | | | | | |
| Wireless | 5.8GHz ISM 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 |
| | | R | 5658M | 5695M | 5732M | 5769M | 5806M | 5843M | 5880M | 5917M |
| | Sensitivity | -90dBm±1dBm | | | | | | | | |
| Receiver | Channel | 40Channel(5BandX8Channel) | | | | | | | | |
| | Antenna Port | 2 X SMA,50ohm | | | | | | | | |
| | Diversity receiving | Antenna diversity | | | | | | | | |
| | TV System | NTSC/PAL | | | | | | | | |
| | Video output level | 1.0Vp-p Typ,75ohm | | | | | | | | |
| | Audio output level | 1.0Vp-p Typ,10Kohm | | | | | | | | |
| Interface | AV IN(Φ3.5,4p) | Video、Stereo Audio input | | | | | | | | |
| | HDMI IN (C Type) | Support HDMI 1.3 Digital Input, Support HDMI Audio in Support resolution: 1920x1080p50、1920x1080p60、1920x1080i50、1920x1080i60、1280x720p50、1280x720p60、720x576p50、720x480p60、720x576i50、720x480i60. | | | | | | | | |
| | DIV AV | Diversity receiving, Video、Audio output | | | | | | | | |
| | EAR OUT(Φ3.5,3p) | Stereo 16Ω/150mW | | | | | | | | |
| | PPM IN(Φ3.5,3p) | Support 5~8 channel PPM IN | | | | | | | | |
| Front Camera | FOV | 100 degrees (Diagonal) | | | | | | | | |
| | Resolution | 640X480(VGA) | | | | | | | | |
| Power Supply | DC IN | 7~28V/2A | | | | | | | | |
| | Consumption | 6.8W/12V | | | | | | | | |
| Dimensions | | 169X70X42mm(not include prominent part) | | | | | | | | |
| Net Weight | | 160g | | | | | | | | |
| Working Temperature | | -10℃~+65℃ | | | | | | | | |

MBP01

Operating instruction



Safety Warning

- In order to reduce the risk of fire, electric shock or product damage, do not let the machine rain, exposure or moisture.
- Please use only recommended accessories.
- Do not disassemble the product and should be serviced by qualified person.

Attention

- Do not install the machine or put it in other enclosed spaces such as bookcases and closets to avoid the risk of electric shock or fire due to overheating.
- Do not allow the unit to be placed near a fire such as open fire.
- The machine is not dust proof, not waterproof, please note when using.
- The product can not charge and discharge at the same time.

Product Content



MBP01



Output cable

Function diagram



Usage

• Charging

Please insert the 12V / 2A power adapter into the power input interface, red charging indicator light is on, at the same time, the blue power indicator will flash; when the four blue lights are flashing in turn, it means that the battery is fully charged; When the four blue lights are all off, only the red light is on, that means the battery is fully charged.

• Check the power

Short press the power button, red, blue light will flash for about 3 seconds then automatically off (1 blue light flashing for about 25% of the electricity, 2 blue light flashing for about 50% of the power, 3 blue light flashing for about 75%, 4 blue light flashing for about 100% of the power)

• Discharge

The power output line corresponding to the positive and negative direction inserted in the power output interface, according to the output voltage need, toggle the switch to 7.4V or 11.1V position, short press the power button once, after the release, immediately long press the power button for about 3 Seconds until the power indicator blue lights are all on in turn ,that means boot successfully. When the four blue lights are off in turn (that the lack of electricity), please charge in time. When the power alarm indicator light flashes 60 seconds will automatically shut down.

• Shut down

Short press the power button once, after the release, immediately long press the power button for about 3 Seconds until the power indicator blue lights are all off in turn ,that means the battery is off.

Specification

| | |
|------------------|--------------------|
| Input | DC IN 10-20V/1A |
| Output 1 | 7.4V/1500MA 11.1W |
| Output 2 | 11.1V/1000MA 11.1W |
| Battery capacity | 1000MAH |
| Size | 88*43*21.5mm |
| Net weight | 80g |