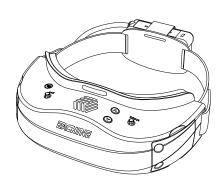


Eachine EV300D **NEW 5.8G FPV Goggles** 



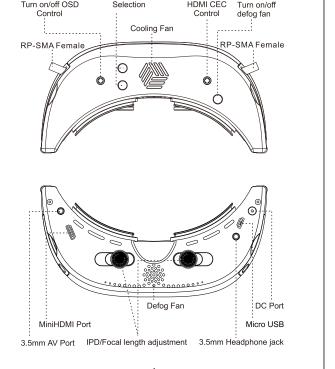
White/Black **User Manual** 

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#### Package Included

Eachine EV300D Goggles *1	Sponge*1 + EVA pad*2
Zipper case*1	User Manual*1
Eyeglass Frames*2	18650 battery case*1
Lens wiping cloth*1	Third party module cover*2
FPV Receivers*2 (Only set B	available)



# Product specifications

Resolution 1280\*960

Resolution	1280*960
IPD	56 ~ 72 mm (Adjustable)
Focal length	Under 800 degree of myopia and Hyperopia 300 degrees
FOV	42° ( Diagonal )
Video Format	NTSC/PAL Auto selecting
User Controls	Channel / Band selection Mode (5.8G / Racer / HDMI / AV ) PICTURE / SOUND / OPTION / VOLUME Power on and off / Turn on and off Fan / OSD / DVR
Digital Video	Integrated analog mode DVR TF card max 64G. Video compression format AVI
Ports	3.5mm AV in/out port 3.5mm stereo earphone port DC-IN(25~65)/Micro USB/HDMI port/TF slot
Battery case	7.4V 18650 LI-ION battery case with integrated USB charger and LED indicator(2x3.7V LI-ION 18650 style cells not included)
Frequency	5.8GHZ 5333 ~ 5945MHZ
Operating Temp	-9°C~39°C
Dimensions	185*90*40mm
Weight	208g
Packaging	240*140*100mm

## Power on/off and turn on/off defogging fan control

Power supply: (1) DC in: 7.4V~30V(2S~6S), The device will not work when the DC input voltage is higher than 30V. The device hardware is designed with overvoltage protection to prevent damage from excessive voltage. The device will work properly once reconnect the appropriate power supply.;

> (2) USB in : 5V==2.4A , When using power bank to supply the gogles, you must select the output port 5V==2.4A with the USB cable voltage drop under 0.4V.

Power on/off: Press and hold the power button for 3 seconds to turn on or off.

Cooling fan: By default, the goggles can not be turned off during operation Turn on/off defog fan : When goggles is powered on, press the power button to turn on the defogging fan, and the fan symbol appears at the top right of the screen. Press the power button again to turn off the ging fan, and the fan symbol disappears at the top right of the screen.
When defogging fan is turned on, it will automatically turn off after

#### Mode/Volume/Menu control

AV Port

Controls

Mode: a.5.8G mode: Default mode after booting . long press "mode" button towards the right until it beeps to enter Input Source page. Press "mode" button forward or backward to selecting ,short press "mode" button vertically to switch HDMI /5.8G/AV.

b.Racing mode: Under 5.8G mode, short press "mode" button vertically to switch mode from 4 pilots/6 pilots/8 pilots. For example: 4 pilots/6 pilots/8 pilots/exit racing mode switching circularly.

10 minutes with no operation. If you need to use it, please turn it

c.Auto search: Long press "mode" button vertically until first beep to d.Turn on/off OSD: Long press "mode" button vertically until second

beep to turn on/off OSE Volume: Press "mode" button forward or backward to increase/decrease.

## >I ong press "mode" button toward left unit it been, entering MENU. Then

- press mode button towards left or right to switch PICTURE/SOUND/OPTION page. The selected option turns to yellow background. In PICTURE page, there are Picture Mode Standard/Color Temperature /Aspect Ratio/Noise Reduction/MPEG Noise Reduction .Picture Mode
- Standard contains standard/soft/vivid/user. ➤ In User mode, brightness/contrast/color/sharpness/tint are adjustable. The default value of user mode is 50. Press mode button towards left
- or right to change parameter. ➤In Aspect Ratio, adjust settings Auto/4:3/16:9/Zoom1/Zoom2/Panorama(Default) In SOUND page, there are Sound Mode Standard/Balance/Auto Volume /Surround Sound.Sound Mode Standard contains music mode/movie mode/sport mode/user mode. In User mode, treble/bass parameters
- ➤In OPTION page,Restore Factory Default/HDMI CEC/Color Range/ Software Update(USB),press "mode" button forward or backward to select, when selected option turns into yellow, short press "mode" button vertically to confirm, press mode button towards the left or right to change settings. Long

## Under menu page, it will auto-exit if no operation done

#### Channel/Band select

18650 Battery Case

waring & precautions.

Not for children under 14 years. This is not a toy.

18650 BATTERY CASE

Channel: Short Press channel up/down buttons will cause the channel to frequency table).

Band: Long press channel up/down buttons will cause the band to incrementally decrease from band A to H (refer to frequency table)

Built-in DVR H.264 Encoded Video Video Format : Auto toggles between NTSC or PAL. DVR Recording file resolution: NTSC at 720\*480 or PAL at 720\*576. High-quality Video encoding with H.264, 30fps. Storage speed ≥ 10 (Class 10) high speed TF card recommended.

7.4V 18650 LI-ION battery case with integrated USB charger and LED indicator (2x3.7V LI-ION 18650 style cells not included)

to return Play Video List page, then long press DVR button towards the right to return REC mode.

press button towards the right to return REC mode.

vise pressing button is unavailable.

>TF high speed card must be formatted before using, otherwise

> Please turn off the device while inserting or removing TF high

-Whether TF card is inserted a. Check TF slot. b. Under REC mode, screen will display TF card symbol as ☐

If no TF card inserted, screen will display symbol as 🗵

Under REC mode(available TF cards), long press DVR button towards the right until it beeps to enter Play Video List page.

Press DVR button towards the forward/backward/right/left to select a video and short press DVR button vertically to play.
Under play status, short press DVR button vertically to pause video play;

short press DVR button towards the left or right to back or fast forward

In Play Video List page, long press DVR button towards the left until first

beep to enter Playback, where users can Delete or Protect files.

Press DVR button towards the left or right to switch to Movie Mode or

General Settings, long press DVR button towards the right until first beep

Long press button towards the right to return Play Video List page; then long

play, short press DVR button vertically to return to normal video play

Under 5.8G mode(available TF cards), long press DVR button vertically until first beep to enter REC mode. Short press DVR button vertically to start recording(dot character change from green to red), press DVR button vertically again to pause recording (dot character change from red to green). Long press DVR button vertically until first beep to exit REC mode. Under REC mode, short press DVR button vertically, if goggles beep continuously and exit REC immediately, saying that TF card run out of memory. Please change a TF card or format this TF card.

DVR can only record signals in RF mode, it is not able to record

speed card to avoid damage of the card or device.

the device may not be recognized.

signals in HDMI mode and AV mode.

### Upgrading

- •TF card upgrading(TF card max 32G)
- 1. Format the TF card and load in the upgrading file SD\_CarDV.bin into TF card root directory, insert the TF card into the goggles then power it on, the goggles will get into automatic upgrading status and keep beeping, the upgrading will end up with a long alarming. Taking the TF card out to check if the upgrading file SD\_CarDV.bin is still there, if not, the upgrading is success, then power it off and restart; If file is still there, please retry.
- 2.For upgrading failure(wrong processing, TF card took out, goggles powered
- 2.For upgrading failure(wrong processing, 1F card took out, goggles powered off), imperative upgrading operation is necessary.
  a. Power off the goggles, format the TF card and load in the imperative upgrading file SdFwCode.bin and upgrading file SD\_CarDV.bin.
  b. Insert the TF card into the goggles then long press and hold DVR button vertically and plug battery, then press the power button to turn on the goggles, release the DVR button when it start beeping, and the pgrading begin, the process will end up with a long alarming. Formating the TF card and power off the goggles and restart
- power off the goggles and restart. • IC (Zbit32) upgrading operation
- 1. Load the USB device into the upgrade file MERGE.BIN and insert it into the micro usb interface of the goggles. Press the mode button towards left to enter menu, select software Update (USB) in Option sub-menu, and short press to confirm Upgrade, Restart EV300D until progress bar complete. (Note: please do not power off during upgrading process)
- 2. Please refer to IC upgrade manual. (TF card must be taken out)



www.eachine.com

# OSD display

## 5.8G mode:



- L stands for left, R stands for right (the RX modules are printed with L or R stickers). There are two antenna plugs on the RX modules of left and right side. Each of the sides have blue and red LED, used to distinguish 1# and 2# antennas. Green bars stand for antenna signal strength. Red X indicates no antenna signal inputs. If using a third party RX module, the RSSI function will not be available.
- Defogging Fan icon.If it appears on the display in green color, indicating defogging fans is activated. Otherwise, it is deactivated.
- —REC icon.Entering REC mode, if REC icon appears on the display in green color, indicating recording function standby. REC turns red indicates recording in progress. REC icon disappears when exit REC mode. \_\_\_TF Card icon.Entering REC mode, if TF card icon appears on the display
- In green color, indicating TF card available. Otherwise, TF card unavailable — Battery Capacity icon.Battery capacity icon appears on the upper right of the display in green color, indicating 5-level battery capacity 100%/75%/50%/25%/0%.

Racing mod

Mode	Status description
RACER-4	RACER-4-1
RACER-6	RACER-6-2
RACER-8	RACER-8-8

# Goggles Supports Open Source RX Modules. When using two diversity receivers, you should not use third-party (Include EV200D) diversity receiver and EV300D diversity receiver together ► A third party RX module is able to work with EV300D, but it is not controllable IPD/Focal length Adjustme Under 800 degree of myopia \* (O) \* (O) Adjust the diopter to a suitable condition by turning the knob clockwise or counterclockwise. Move the slider to adjust IPD. (+) means to increase IPD, (-)means to decrease IPD. Eyeglass Frames

FPV Receiver

Frequency: 5.8GHZ

SMA: RP-SMA Female

Receiver Sensitivity : ≤ -93dB

# HDMI Port(support CEC con The HDMI port can be connected to HDMI devices via a MiniHDMI to HDMI cable.(max resolution 1920\*1080)

- Order of connection a. Press and hold mode button towards right to enter input source.
- HDMI support CEC control: After entering the HDMI display, the device (support CEC control) that connected to goggles will be controllable via DVR 5-way button. Press DVR 5-way button vertically to play/pause or confirm. Press the button towards left/right/up/down to select. Press and

c. Connect the Mini HDMI to goggles.

hold the DVR button towards right to return to previous. Press and hold the DVR button towards right twice to exit. Press and hold the DVR button vertically to return to the main page. Standby control: When pressing button to power off the goggles, connected HDMI CEC device will enter standby status, eliminating complicated operations.

defective, try with alternative HDMI sources and alternati

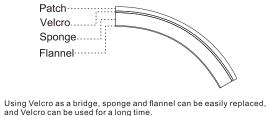
### Micro USB Port

## Micro USB Port

•For firmware upgrading: Upgrading via PC(Upgrade USB cable provided) and •Alternative power supply, when using power bank to supply the gogles, you must select the output port 5V==2.4A with the USB cable voltage drop under 0.4V

If multiple power sources are supplied at same time (Like: power Bank and head strap battery) the goggles will draw power from the highest voltage

# AV input & output Support external HDMI to AV input Support external DVR Detachable Patc Snap joint assemblies allows easy replacement and maintenance. Replaceable spor



# Low battery warning: Buzzer warning if input voltage drops below 6.8V. Power-checking button Charging indicator light USB Prot -Battery charging Charge only with a USB port 5V==2A If the goggles not turned on after power on , it means that (1)the battery voltage is too low, please replace with a fully charged battery; (2)The battery pack is reversed in the direction Please re-install the two 18650 batteries according to the label It is not recommended to charge the battery via PC USB, since the insufficient current will damage the battery. If the battery case is not used for a long time,do not install the battery. **▲**WARNING ➤Do not use if signs of failure. Never leave batteries near fire or high temper. There are dangers using charging lithium-ion batteries.

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# Band & Frequency tab

# Band-A 5865 5845 5825 5805 5785 5765 5 Band-r 5658 5695 5732 5769 5806 5843 5880 5917

Racing mode frequency								
4 pilots								
6 pilots	5533	5613	5705	5785	5865	5945		
8 pilots	5528	5582	5645	5705	5765	5825	5885	5945

## Trouble Shooting

No image, display is completely dark

 No power supplied. Check power connections. No image, display is grey

If using wireless module, ensure RX is working. If using AV in cable, check video source.
Ensure TX is on and camera connections solid

 Ensure lens cap is removed from camera Complete white screen

•LCD driver has failed and needs to be replaced under warranty. Contact your retailer. Short range

•Ensure 5.8Ghz antenna were installed

128G铜版纸黑白正反印刷折页 折叠尺寸:130\*90mm