



Analog Module Quick Mount + DVR for Walksnail Goggles X / DJI Goggles V2

S SSX556

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Summary

Modular quick release analog module bay with DVR for DJI and Walksnail FPV Goggles.

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Tags: [dji](#) [fpv](#) [avatar](#) [analog](#) [caddx](#) [djifpv](#) [dvr](#)
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Quick release (keyed-slot) analog module bay for Walksnail Goggles X and DJI V2.

Have a look at the awesome original model first. This remix replaces the main body and the “B” mount adapter plate that gets screwed to the back of the main body. The “A” mount quick-swap slot goes onto your goggles permanently, added an “A” mount for the Goggles X and custom front cover plates to go with it.

Any 20x20 mounting pattern DVR board should fit but I specifically designed 2 versions for the following 2 boards:

- Cooai Cooeeye Bayck Mini DVR ([Link #1](#), [Link #2](#), [Link #3](#), translated manual and config file attached in files)
- RunCam Mini FPV DVR ([Link](#))

I personally went with the Cooai as it has significantly higher bitrate (20mbps vs 5mbps) and higher recording resolution (960x768 vs 640x480).

Printing:

Print from something robust with high layer adhesion that isn't brittle; **PCTG/PC/PA** (I used PCTG). Do not use PLA or any carbon/glass filled filaments as the hooks will snap off.

Tolerances are tight, make sure your printer and filament are well calibrated! If anything doesn't quite fit then sand it down.

- Main Body
 - 3 walls/perimeter
 - 15-20% infill (Adaptive Cubic/Gyroid)
 - Tree-Supports
 - 0.1-0.15 layer height
- Cooai / Runcam B Mount
 - Print with quick slot key facing upwards
 - 3 walls/perimeter
 - 20% infill (Gyroid)
 - Tree-Supports
 - Brim
- Goggles X / DJI A Mount
 - Print with quick slot facing upwards
 - 3 walls/perimeter
 - 20% infill (Gyroid)
 - No supports
 - **Big** Brim
- Goggles X front plate covers:
 - Print with front laying down
 - 3 walls/perimeter
 - 15-20% infill (Gyroid)
 - (Tree-)supports
 - 0.1-0.15 layer height
 - Textured PEI sheet for aesthetics
 - Sand down all outer edges that face the Goggles

Melt the 5-6 M2x3 heat inserts (Cooai version uses 5) into the B mount back plate, then solder 3 wires (5V, GND and V) to the DVR pads of the V3

PLUS analog adapter board. Push the main body over the V3 board (make sure to not damage anything, sand some edges down if necessary). Slide the back plate (B) onto the board, then screw the 2 M2x7 screws through the openings in the main body into the back plate heat inserts. Solder the wires to the DVR and screw it onto the back board. Secure the wires with a thick chunk of glue or silicon adhesive. Attach the A mount to your goggles and slide the quick slots into each other.

Replace Goggles X LED front cover:

1. Remove the top part of the face foam to reveal two small screw holes
2. Use a PH0/J0 philips screwdriver to remove the two screws
3. Use a [leverage/opening tool like this](#) to pop off the LED covers
4. Use the same tool to pry open the the VXR top cover
5. Unplug the two LED cables from the VRX board
6. Put the VRX cover back on and the screws back in
7. Take the right 3d printed cover and place the M3 nuts into their recess at the back
8. Screw the Goggles X A mount onto the cover plate using 2 M3x8 socket head screws
9. Snap both cover plates onto your goggles, make sure that the sides are fully inserted, otherwise the M2 screw hole wont line up
10. Secure the cover plates with 2 M2x10 screws

Cooai DVR requires initial setup:

1. Put a MicroSD card in and power it up
2. Wait until the red and blue LEDs are on
3. Press and hold the button for 5-10 seconds until the blue LED start flashing, this will format the SD card
4. Wait until the flashing is over, then wait another 5 seconds
5. Power it down and up again
6. Wait 10 seconds (both LEDS should be solid)
7. Power it down again and put the SD into your computer
8. The DVR should have written a file containing its firmware version
9. Place the attached config.txt of this remix onto the root of your SD card
10. Put the SD back into the Cooai DVR
11. Power it up and make sure the analog module is receiving a video signal
12. DVR should auto-start recording, indicated by slowly flashing blue LED

BOM:

- ImmersionRC Rapidfire / TBS Fusion / Foxeer Wildfire analog module

- Fatshark Analog Receiver Module Adapter V3 PLUS for Digital FPV Goggles ([Link #1](#), [Link #2](#))
- Mini DVR board with 20x20mm mounting
- 5-6x M2x3 Heat inserts ([Link](#))
- 2x M2x7 screw
- 3-4x M2x4 or M2x5 screw
- Hotglue, E6000 glue, Silicone adhesive or any other adhesive to secure the DVR wires

Google X BOM:

- 2x M3x8 socket head screw
- 2x M3 nut
- 2x M2x10 screw

This remix is based on



Analog Module Bay Mount quick release for V2 + V3 Adapter on DJI Goggles

by t4obrien



walksnail goggle x no led remix

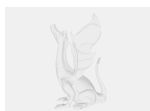
by dg fpv

Model files



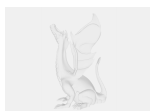
STEP Files

5 files



analog-mod-bay-mount-b-cooai.stp

☐ Goes onto the back of the main body, will slot into mount A



analog-mod-bay-mount-b-runcam.stp

☐ Goes onto the back of the main body, will slot into mount A



analog-mod-bay-mount-a-goggles-x.stp

☐ Goes onto your Walksnail goggles, mount B slots into this



walksnail-goggles-x-cover-right.stp

☐ Right front plate cover



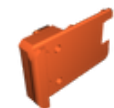
walksnail-goggles-x-cover-left.stp

☐ Left front plate cover



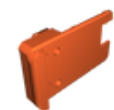
analog-mod-bay-v3-body-with-cutout.stl

☐ Main receiver module body



analog-mod-bay-mount-b-cooai.stl

☐ Goes onto the back of the main body, will slot into mount A



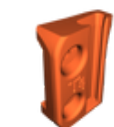
analog-mod-bay-mount-b-runcam.stl

☐ Goes onto the back of the main body, will slot into mount A



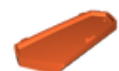
analog-mod-bay-mount-a-goggles-x.stl

☐ Goes onto your Walksnail goggles, mount B slots into this



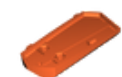
analog-mod-bay-mount-a-dji.stl

☐ Goes onto your DJI goggles, mount B slots into this



walksnail-goggles-x-cover-left.stl

☐ Left front plate cover



walksnail-goggles-x-cover-right.stl

☐ Right front plate cover

Other files



cooeye-mini-dvr-manual_en.pdf

☐ For Cooai: translated manual



config.txt

☐ For Cooai: place this onto the SD card root folder after formatting

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