

FatShark DVR Firmware Update v1.2a

21/1/2019

What Was Fixed

With rapidFIRE, and certain other goggle modules that rebuild the video signal, the FatShark DVR has a tendency to record annoying black flashes, especially when the incoming signal is weak.

These black flashes are noticeably worse with PAL cameras than NTSC, but NTSC does suffer to some extent also.

Side-Effects of Fix

The v1.2a DVR firmware will no longer switch between PAL and NTSC after recording has started. Stop, and re-start recording to switch to a model that could be using a different standard.

If you routinely start recording, and then switch channels looking for your model's feed, this may cause an issue if another pilots feed happens to be transmitting the opposite standard.

How to Upgrade

The upgrade is not a firmware upgrade for rapidFIRE, but instead it is a firmware update for the FatShark DVR.

The procedure to update may be found later in this document, please read, and follow it very carefully to avoid bricking your DVR.

Compatibility

The upgrade is compatible with FatShark goggles listed in the below table. The Dominator HD v1, and the Dominator v2 require an upgraded DVR board to accept the firmware upgrade. Attempting to update these two goggle versions with the supplied firmware image is guaranteed to brick the DVR.

Model	Aspect Ratio	Upgradable	Replacement DVR
Dominator HD v1	4:3	⚠ Not directly, requires FSV3303 upgrade	FSV3303
Dominator HD v2	4:3	Yes	FSV3303
Dominator HD v3	4:3	Yes	FSV3303
Dominator SE	4:3	Yes	FSV3303
Dominator HDO	4:3	Yes	FSV3305 *
Dominator T2	4:3	Yes	FSV3305 *
Dominator V1	4:3	No, No DVR in this model	None Available
Dominator V2	4:3	⚠ Not directly, requires FSV3303 upgrade	FSV3303
Dominator V3	16:9	Yes	FSV3303
Attitude v4	4:3	Yes	FSV3303

In event of problems...

If, for any reason, the update fails, and the DVR no longer functions, there are two possibilities.

1) Send an email to repairs@fatshark.com and arrange to have the goggles returned and re-flashed.

2) Purchase the **FSV3303, or FSV3305** upgrade board (see table above), available for about \$29.99.

* The FSV3303 is available from many online stores, the FSV3305 is available currently only from www.antigravitysports.com

Note that due to the cost of shipping each way, the upgrade board repair should end up cheaper in most cases, and has the advantage of not needing to send in your goggles.

Also note that unbricking DVRs does not fall under the FatShark warranty.

Update Procedure

The following procedure should be followed to the letter to avoid bricking the DVR.

1. Format a micro SD card using the in-goggle DVR menu
2. Power down your goggles
3. Using your computer, place the supplied **CRESFW.BIN** file in the root of the SD card. Ensure that the SD card write is complete (ideally eject the card cleanly) before removing.
4. Install the SD card into the goggles
5. Power up the goggles, wait for a bunch of flashing.

DO NOT REMOVE THE CARD, OR POWER, WHILE THIS IS HAPPENING

6. When the flashing stops, and the LED turns off, remove power and **wait for > 15 seconds.**
7. Power up the goggles, and verify that the DVR still works

Note that the firmware file will be removed during installation, so no need to remove it manually

Warning: The filename CRESFW.BIN is common, and used by several non-FatShark DVRs. Be careful to ensure that the file used to upgrade your goggles is the correct one, as supplied by ImmersionRC/FatShark.