

## HDZero FAQ

No.	Question	Answer
1	What is HDZero?	<p>HDZero is a wireless video transceiver technology developed and owned by Divmath. It has the following products:</p> <ol style="list-style-type: none"> <li>(1) Shark Byte TX5S.1 VTX</li> <li>(2) Shark Byte TX5M.1 VTX</li> <li>(3) Shark Byte TX5R.1 VTX</li> <li>(4) Shark Byte RX5.1 VRX (goggle module)</li> <li>(5) ScoutHD Goggle</li> <li>(6) ByteFrost</li> </ol>
2	Where is the firmware and user manual?	<a href="https://www.hd-zero.com/document">https://www.hd-zero.com/document</a>
3	How is firmware organized?	<p>VTX and VRX have to on the same reversion for working together.</p> <ol style="list-style-type: none"> <li>(1) RX5.1.ddmmyyyy.zip, the firmware for RX5.1,</li> <li>(2) TX5S.1.ddmmyyyy.zip, the firmware for TX5S.1,</li> <li>(3) TX5M.1.ddmmyyyy.zip, the firmware for TX5M.1,</li> <li>(4) TX5R.1.ddmmyyyy.zip, the firmware for TX5R.1</li> </ol> <p>ScoutHD release is named as "ScoutHD_ddmmyyyy.zip". It does NOT contain firmware for any VTX.</p> <p>ByteFrost release is named as "ByteFrost_ddmmyyyy.zip", it contains firmware for ground station (monitor), but does not have firmware for AHD VTX.</p>
4	How to Update Shark Byte Firmware?	<ol style="list-style-type: none"> <li>(1) Download firmware from <a href="https://www.hd-zero.com/document">https://www.hd-zero.com/document</a></li> <li>(2) Please follow steps on Page 14 on Shark Byte User Manuel 08042021.pdf</li> </ol> <p>Note: Both VTX and VRX need to be updated with the same release. VTX will NOT work properly with VRX that is on firmware from different release</p>
5	How to Update ScoutHD Firmware?	<ol style="list-style-type: none"> <li>(1) Download the firmware from <a href="https://www.hd-zero.com/document">https://www.hd-zero.com/document</a></li> <li>(2) Unzip content of "ScoutHD_ddmmyyyy.zip" onto root directory of a SD-card, insert the SD card into ScoutHD</li> <li>(3) Power on the ScoutHD, and wait for "Success" to be shown on screen.</li> </ol>
6	How to Update Byte Frost (monitor) Firmware?	<ol style="list-style-type: none"> <li>(1) Download the firmware from <a href="https://www.hd-zero.com/document">https://www.hd-zero.com/document</a></li> <li>(2) Unzip content of "ByteFrost_ddmmyyyy.zip" onto root directory of a SD-card, insert the SD card into Byte Frost</li> <li>(3) Power on the Byte Frost receiver, and wait for "Success" to be shown on screen.</li> </ol>
7	How to un-brick a RX5.1/ScoutHD/ByteFrost monitor	Follow steps on Page 14 on Shark Byte User Manual 08042021.pdf
8	Can VTX be powered by 6S?	<p>Yes, all VTXs can be powered by 2S-6S except the following:</p> <ul style="list-style-type: none"> <li>- first batch of TX5M.1 that does not have a black tin box on the corner</li> <li>- first batch of TX5S.1 that has serial number starting with "0B"</li> </ul> <p>It is mandatory to put a big capacitor (220+ uF 50V) in parallel to battery leads to smooth the power supply of the whole quad when VTX is directly powered by battery.</p> <p>It is strongly suggested to use BEC output to power VTX. The BEC has clean voltage than directly powered from battery</p>
9	Does VRX have low voltage alarm?	VRX does not have low voltage alarm. We recommend using an in-line battery alarm (not included) between the battery and DC cable
10	How does VRX power cable work?	<p>DC cable has integrated DC regulator which converts from 3S-6S to fixed 7.8V output.</p> <p>It is very important to unplug DC cable from battery after flight. Otherwise, DC cable will suck up battery power and cause permanent damage to battery.</p>
11	Video feed in working but no OSD	<ol style="list-style-type: none"> <li>(a) VTX/VRX Firmware mismatch: Update both VTX and VRX from the same firmware release.</li> <li>(b) Wire connection: TX and RX of FC board should connected with RX and TX pads of VTX respectively.</li> <li>(c) Betaflight setting: Instruction on Page 10/11 on Shark Byte User Manuel 08042021.pdf <ul style="list-style-type: none"> <li>- Betaflight 4.2.8 or above</li> <li>- CLI commands</li> </ul> </li> <li>(d) Try another UART port of FC ( avoid to use soft-serial and SA ports)</li> </ol>
12	No Blue LED on VTX	<ol style="list-style-type: none"> <li>(a) Check if MIPI cable is secured on both end of camera and VTX, and check if cable itself is fine</li> <li>(b) If it is Foxeer Digisight Camera, make sure it is NOT on analog mode</li> <li>(c) If it is Micro HDZero camera, it needs firmware that is released after June 23 2021</li> </ol>
13	Snow noise even in short distance	<ol style="list-style-type: none"> <li>(a) Add a big capacitor (220+ uF 50V) in parallel to battery leads to smooth the power supply of the whole quad</li> <li>(b) Move Radio RX and its antenna away from VTX</li> <li>(c) Do not place VTX next to ESC board</li> <li>(d) Try another pigtail (if there is)</li> <li>(e) Try another antenna</li> <li>(f) Ensure U.FL connector of VTX has at least 7mm vertical clearance</li> <li>(g) Check if there is other VTX (analog, DJI, HDZero) working on current channel</li> </ol>
14	Recording files are zero byte length	<p>There are two recording file format: TS and MOV format</p> <p>On TS format, VRX ensures video will be recorded until last second before VRX is powered off.</p> <p>On MOV format, VRX will not have enough time to close the recorded file if VRX is powered off. Therefore, it is important to manually close the file by switching to setting mode (Long press Left key) or switching channel (press Right key) before powered down VRX</p>