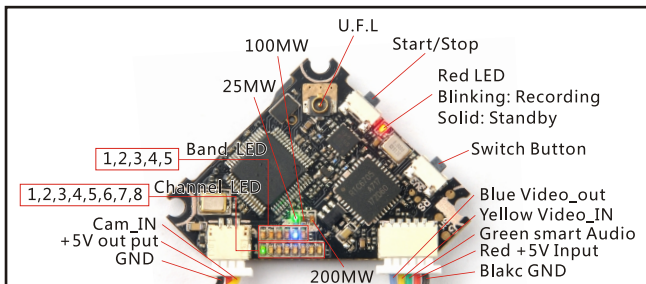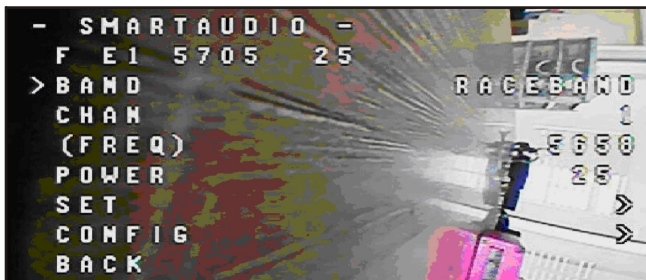## 1.Connection Diagram

2.VTX and SmartAudio set

Vtx power set

Go to Betaflight configurator CLI tab , type "set vtx_power=1 " to choose 25mw , "set vtx_power=2" to choose 100mw , "set vtx_power=3" to choose 200mw ,need to type "save"

There are 3 ways to switch the vtx channels:

1.Short press to choose the VTX channel , Press and hold the butoon for 2 seconds and release to choose the VTX band(Can't save , it will lost the channel while power off)

2.Enable Smartaudio for UART1, then move the stick of the transmitter (THR MID+YAW LEFT+ PITCH UP) to enter OSD Menu, Enter to Features, then enter to VTX SA to set VTX Band and channel

3.Go to Betaflight CLI ,type the command:
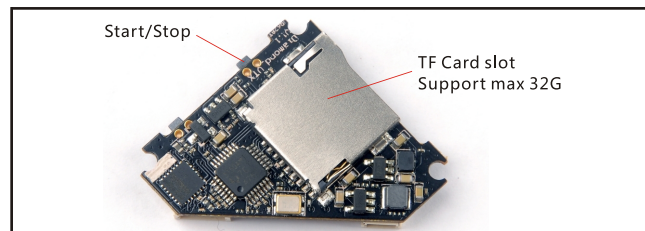
Set vtx_band=3

Set vtx_channel=1

save

Notes: The vtx_freq should match the vtx_band and vtx_channle as the VTX Channel list shows. For example, if you set vtx_freq=5732, you should set vtx_band=5 and VTX_channel=3

Frequency and channel frequency table:

FR \ CH	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Band1	5865M	5845M	5825M	5805M	5785M	5765M	5745M	5725M
Band2	5733M	5752M	5771M	5790M	5809M	5828M	5847M	5866M
Band3	5705M	5685M	5665M	5665M	5885M	5905M	5905M	5905M
Band4	5740M	5760M	5780M	5800M	5820M	5840M	5860M	5880M
Band5	5658M	5695M	5732M	5769M	5806M	5843M	5880M	5917M

3.DVR setting

The DVR will recording automatically when power on .
Press the start/stop to start or stop recording.

4.DVR firmware update

Step 1, Download the latest firmware from www.happymodel.cn, extract the CRESFW.BIN to an empty TF-SD card

Step 2, Put the TF-SD card into Diamond vtx , and power on for it, the red Led will starting to flashing, Then waiting to the red LED turn off, this indicates firmware upgrading successfully

Step3, Important!!! You must power off the Diamond VTX immediately once the red LED turn off. Don't turn off the power during firmware upgrading ,And remember to remove the CRESFW.BIN firmware from TF-SD card after upgrading .