Setting up the Team Black Sheep UNIFY PRO 5V, HV, RACE transmitter

FlyMod inc

5–6 minutes

---

15 Сен 2016, 00:55

Description of settings of one of the smallest and highest quality transmitter at the moment Team Black Sheep UNIFY PRO version **5V V2**, **HV**, **HV Race**. The device has a number of features that are described in this manual.

To give you an example, below is a table of the differences between the versions of the transmitter.

5G8	HV	V2	RACE
Power Output	25mW - 800mW		25mW - 200mW
Max Voltage	2S - 6S (up to 25.2V)	5V	2S - 6S (up to 25.2V)

XFLYMOD

The transmitter has two states Locked and Unlocked. In Locked mode you will NOT have access to power selection (default 25mW) and some frequencies highlighted in red in the transmitter frequency table, as they may require a license in your country. By default the transmitter is in Locked mode.

The **TBS Unify Race** version also has an optional **Low** Race grid which will be available in Unlocked mode. Low Race allows you to use the low frequency channels from 5.3 to 5.6Hz, which will give you the advantage of a clean video signal when flying with other pilots who use the standard 5.8Hz channels.

Channel	1	2	3	4	5	6	7	8
Band A	5865	5845	5825	5805	5785	5765	5745	5725
Band B	5733	5752	5771	5790	5809	5828	5847	5866
Band E	5705	5685	5665	5645	5885	5905	5925	5945
FS	5740	5760	5780	5800	5820	5840	5860	5880
Race Band	5658	5695	5732	5769	5806	5843	5880	5917
Low Race	5362	5399	5436	5473	5510	5547	5584	5621

XFLYMOD

After power up the transmitter will boot up and the blue LED will start to light up with a steady blue light, this indicates Locked mode. If the transmitter is in Unlocked state, the blue and red LEDs will light up simultaneously.

It is the steady light of the LEDs that indicates that you are in normal video transmission mode and not in the transmitter menu.

Transmitter menu

All settings are done through the menu, which you can enter by holding the transmitter button for 3 seconds.

Red LED		Blue LED							
		1	2	3	4	5	6	7	8
1	Channel	1	2	3	4	5	6	7	8
2	Band	A	B	E	FS	RB	L		
3	Power	25mW	200mW	500mW	800mW				

Channel selection

After entering the menu you will be taken to the first menu item - selecting the video broadcast channel. The red LED will blink once to inform you that you are in the first menu item. Changing the channel is done by briefly pressing the button. To indicate the number of the selected channel is a blue LED, which will blink the number of times equal to the selected value.
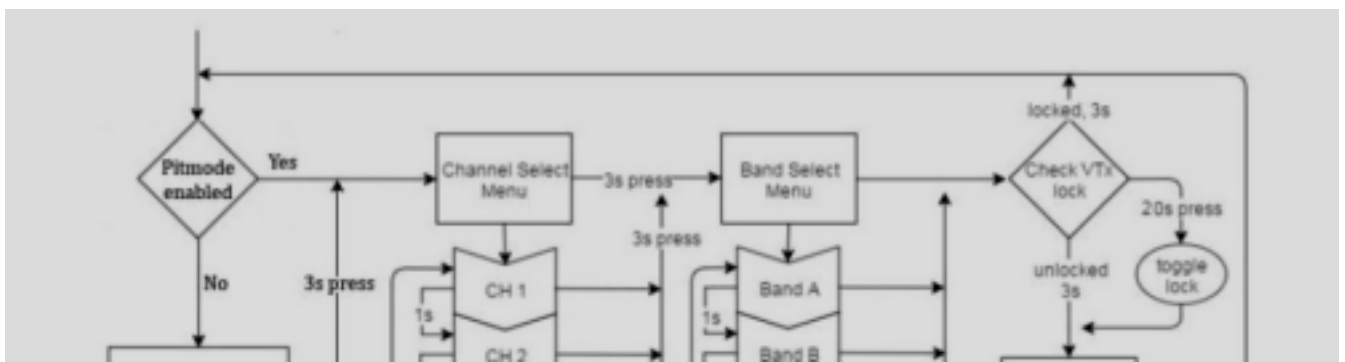
Bandwidth selection

To move to the next menu item, hold the button down again for 3 seconds. The red LED will blink 2 times. Changing the frequency grid is done in the same way as changing the channel by its number.
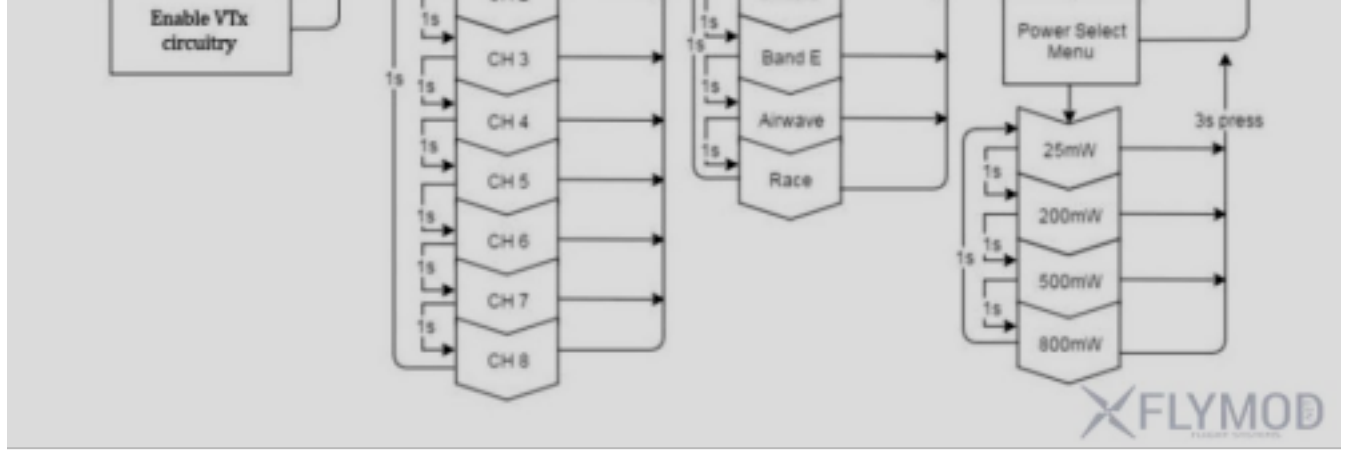
Power change.

In unlocked state you will have access to the third menu item to change the transmitter power. 25\200\500\800 mW (Race version only up to 200mW). Go to the third menu item as simply by holding the button for 3 seconds.

Save settings and exit

Just hold the button for 3 seconds at the last menu item, the transmitter will exit the menu and save the settings and the LEDs will light up permanently.
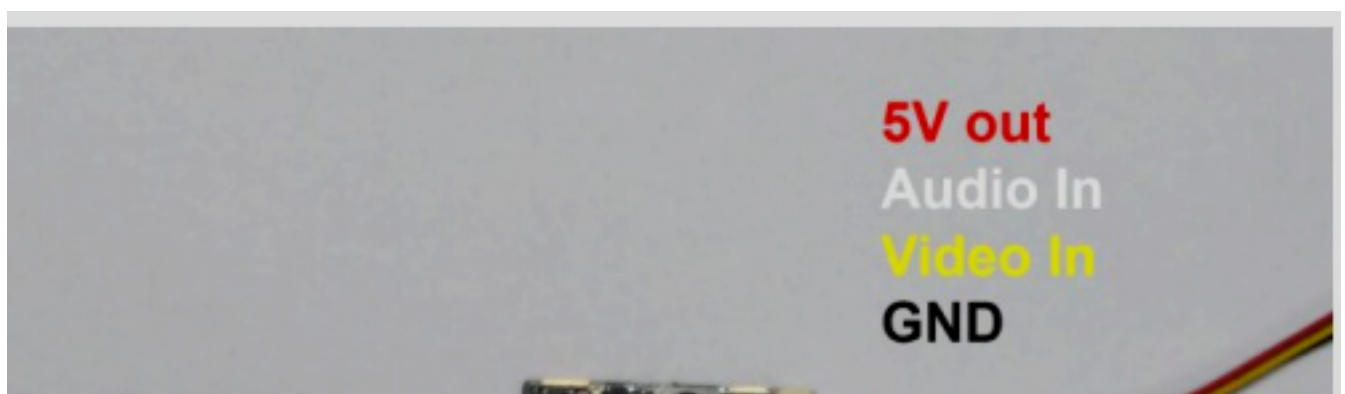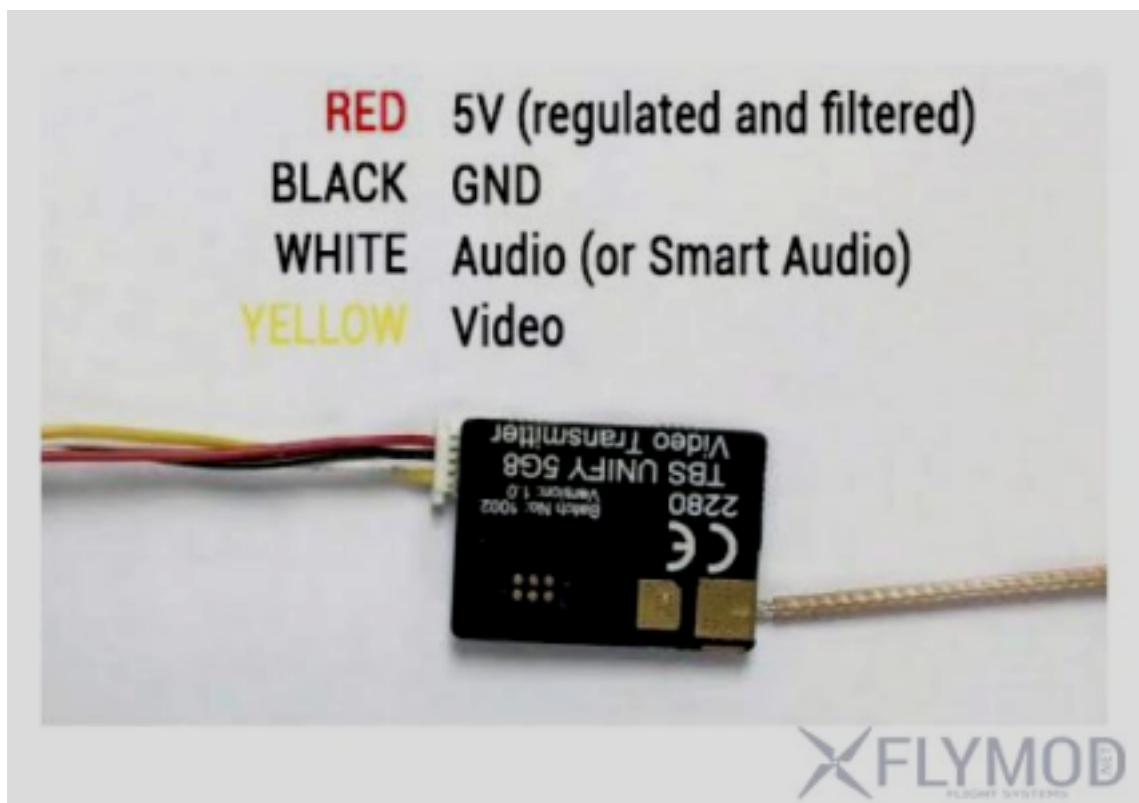
TBS Unify power supply

Versions labeled **HV** (regular 800mW or Race) can be powered directly from a 6V to 26V (2S to 6S) battery, with maximum voltage peaks up to 31V. HV transmitters also have a 5V reverse output to power the camera. The **5V** version must be powered from a **5V** DC source, preferably already filtered by an LC filter.

Current consumption: 25mW: 250mA, 200mW: 320mA, 500mW: 460mA, 800mW: 600mA.

Color	Function
RED	5V (regulated and filtered)
BLACK	GND
WHITE	Audio (or Smart Audio)
YELLOW	Video

5V out
Audio In
Video In
GND

How to unlock the transmitter to be able to change power and select the full list of frequencies

1. Turn on the power

2. Hold the button for 3 seconds (to enter the channel change menu)

3. Hold the button down again for 3 seconds (to enter the frequency grid change menu).

4. Then hold down the button for approximately 25 seconds

5. To save the settings, hold the button for 3 seconds

6. After that the blue and red LED will be on, which means the transmitter is in UNLOCKED state.

Using PitMode

During races it is convenient to use the PitMode, when activated, the transmitter will not interfere with other users during switching on, but will broadcast the signal just a few meters away at a very low power, giving the pilot the opportunity to adjust and select the frequency without disturbing anyone.

Before the race.

1. Power up the transmitter by holding the menu button.

2. PitMode is activated. The transmitter will not broadcast a signal even if you turn it on and off several times, you can safely change the settings.

Activating signal broadcasting at a race

1. Turn the Unify Pro on normally.

2. When it's your turn to race, hold down the menu button for 8 seconds.

3. The transmitter will start transmitting the signal at the settings it has stored.

After the race

1. Power up the transmitter by holding down the menu button.

2. PitMode is deactivated. The transmitter will work in normal mode.

Other features

HV version	5V version
• Connector: JST-GH, 6pin	• Connector: JST-SH socket, 4 pin
• Dimensions: 22 (H) x 30 (W) x 4 (D) mm	• Dimensions:17 (H) x 24 (W) x 4 (D) mm
• Weight: 7g (without antenna)	• Weight: 5g (without antenna)

Full manual in English