



STEALTH RACEVTx

5.8G Transmitter

USER MANUAL VERSION 1.0

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Introduction

New Stealth Race VTx first look. Super clean images, incredible small size and weight, Stealth mode, Pit mode, <20dbm adjustable power, thermal protection, new protocol for transferring data over the audio channel, separate Bluetooth module with phone app, this is the VTx you need.

Features

- Built-in LC filter for clear video signal easy to control
- Built-in Thermal protection
- Micro-power Pitmode
- Easy control and update firmware via Smartphone Application (Android & iOS)
- Dimensions: 25x19x6mm (LxWxH)
- Weight Lightest: 2.9g (without antenna)
- Channels: 1 Channel
- Battery requirements: 2S-6S Li Po
- Power output: <20dbm
- Output 5V - 1A for camera
- Configure VTx by Transmitter via Peripheral on Betaflight
- Antenna: External antenna

Set frequency and power for Stealth Race VTx

▼ Option 1: Configure FuriousFPV Stealth Race VTx by button

Please configure VTx by button follow below diagram:

NOTE: You need Unlock Stealth Race VTx to use full frequency and power 200mW

▼ Option 2: Configure FuriousFPV Stealth Race VTx by app on Smartphone

This is the first app to configuration for VTx on the world.

Download app at here: <https://play.google.com/store/apps/details?id=com.VTxandroid>

STEP1: You need connect your Stealth Race with module Bluetooth

STEP 2: DOWNLOAD app *Imagination Configuration*



STEP 3: Connect Stealth Race with app Imagination Configuration

Plug battery power to Stealth Race VTX then open *Imagination Configuration* on your mobile. On *Imagination Configuration* click *PAIR DEVICE* to app search your Stealth Race VTX.

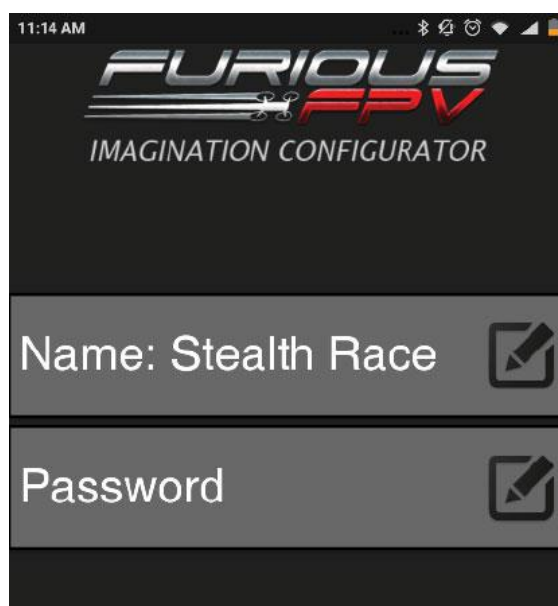
Default password is: 000000

***NOTE:** If you changed password and forgot it, you can press and hold button on VTX 20 seconds to reset your password to default is 000000.

STEP 4: Change name and password

To change your device name and password, please hit PROFILE tab on app. You can use 12 characters for Name and 6 numbers for Password.

Hit BACK on your mobile to come back to home menu.



STEP 5: Select your style quad at home screen using

Mean of icon on app:

- Start-up have a pop-up with 3 selections for VTX power when you plug battery
 - Pitmode: when you plug battery, VTx will be working with Pitmode 0.1mW
 - No power: when you plug battery, VTx will not be working until you hit START
 - Normal: VTX will be working with your channel when you plug battery.
- RIGHT BUTTON: use to turn ON/OFF your VTX.
- SET BUTTON: set your configurations from app to VTX.
- LED STATUS: this icon will blink **RED**/GRAY when connected and not blink GRAY when disconnected

STEP 6: Save your configuration

After select your configurations on app please hit SET button to save your configurations to VTx

***** NOTE:** When VTx at the NO POWER/PIT MODE please click START button on app or hit BUTTON on VTx to Transmit power

v Option 3: Configure FuriousFPV Stealth Race VTx by Transmitter Taranis

You can now adjust rates and VTx settings right from your Taranis menu with Betaflight using LUA script and Smart Port. In this tutorial we are going to show you how. Furious FPV used this article is written by Artur Banach, Oscar and edit by Furious FPV. This guide is written specifically for Betaflight firmware - Fortini F4.

Hardware Requirement

- Taranis X9D or QX7 TX
- Furious FPV SPD15 or XSR RX (Smart Port required)
- Fortini F4 Flight Controller with Betaflight FW, find out if Smart Port is supported natively.
- FuriousFPV Stealth Race VTx – to change VTx settings from Taranis

Update Taranis OpenTX Firmware

Your Taranis TX has to be updated to the latest OpenTX firmware (we tested V2.2 RC14 successfully). The process is simple, and it's covered here:

<https://oscarliang.com/flash-opentx-firmware-taranis/>

Download LUA Script for Betaflight

The LUA script for Betaflight can be downloaded here:

<https://github.com/betaflight/betaflight-tx-lua-scripts/releases>



Please be aware that the LUA script files are different for Frsky X9D, QX7 and the Horus.

Download the latest version available for your transmitter model.

The zip file contains 2 folders: BF and TELEMETRY, and the files need to be copied to the SD card in your Taranis.

1. Copy BF.lua file in TELEMETRY folder to the /SCRIPTS/TELEMETRY/ folder in your Taranis SD Card.
2. And copy the whole BF folder to /SCRIPTS/ folder in the SD card. These are the script interface files needed to make it work.

Betaflight Configurator Settings

First of all, make sure SmartPort is setup properly:

1. In Betaflight configurator, PORTS tab, find the UART where you have connected S.PORT to, then select SmartPort as the Telemetry Output
2. Enable option TELEMETRY in Configuration tab

☐	SOFTSERIAL	Enable CPU based serial ports
☐	SONAR	Sonar
☒	TELEMETRY	Telemetry output
☐	LED_STRIP	Multi-color RGB LED strip support
☐	DISPLAY	OLED Screen Display

Extra Steps for VTx setup

Go to PORTS tab, find the UART4 you connected the VTx to, and choose which VTx you have under Peripherals is IRC TRAMP [Auto]

With Fortini FC I am using SmartPort in UART6, FuriousFPV Stealth Race VTx in UART4 please select IRC Tramp, and SBUS in UART3.

Ports WORKS

Note: not all combinations are valid. When the flight controller firmware detects this the serial port configuration will be reset.
Note: Do NOT disable MSP on the first serial port unless you know what you are doing. You may have to reflash and erase your configuration if you do.

Port Identifier	Configuration	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB WCP	☒ MSP 115200	☐ Serial RX	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	☐ MSP 115200	☐ Serial RX	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	☐ MSP 115200	☒ Serial RX	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	☐ MSP 115200	☐ Serial RX	Disabled AUTO	Disabled AUTO	IRC Tramp AUTO
UART6	☐ MSP 115200	☐ Serial RX	SmartPort AUTO	Disabled AUTO	Disabled AUTO

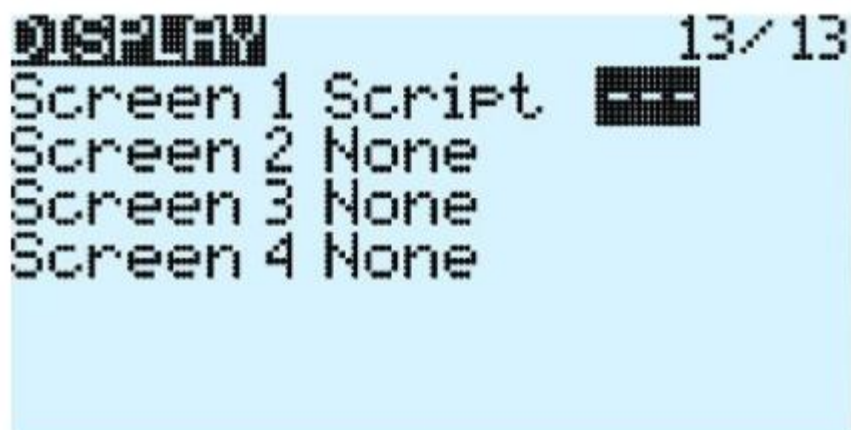
Don't forget to hit "Save and Reboot" when you finish.

Setting up LUA script on telemetry page

We are almost there!

Once you have SmartPort set up, and you have copied the BF.lua file to /SCRIPTS/TELEMETRY/ folder on the Taranis SD card, we can proceed to the final step.

Go to page 13 DISPLAY in your Taranis. Here you can configure which telemetry screen to execute the LUA script. In Screen 1, choose Script as the first option, and then select the BF Lua script in the 2nd option.



You should be able to activate BF LUA script now by holding down the PAGE button (LUA script is triggered by entering Telemetry Screen 1).

Page 1 of the script is for VTx settings.

Betaflight setup: VTX

Band	F
Channel	1
Power	25
Pit	OFF
(Dev)	Tramp

After making VTx setting changes on your Taranis, you can save it by long press MENU button.

That's it!! I hope you enjoyed it, and have fun playing changing VTxchannels from your Taranis in the field! :)

Note

General, the 5.8G module will connect to a main controller board and fixed on the main controller host, then we will mounted them in a closed metal box to prevent radiation emissions and meets the requirements of FCC 15.212 and KDB 996369.

FCC WARNING

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

15.105 Information to the user.

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful

interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination.

The firmware setting is not accessible by the end user.

The final end product must be labelled in a visible area with the following:

“Contains Transmitter Module 2ARL3-VTX5G8”



Thanks for using our product