VRX

5.8G FM demodulation FPV Receiver

User Manual

rev: 260416
Made in Taiwan

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INTRODUCTION

The **VRX 5.8G FM demodulation FPV Receiver** is a high-performance video receiver designed specifically for wireless video transmission systems, particularly suitable for FPV (First-Person View) applications such as drones, remote-controlled vehicles, and other remote monitoring systems. Paired with the TT-VTX video transmitter, the VRX receives high-quality wireless video signals and converts them into clear image displays, providing a stable and smooth visual experience.

- ⇨ **High Sensitivity Reception**: The VRX can consistently receive video signals from the TT-VTX, maintaining stable video quality even at long distances or in complex environments.
- ⇨ **Multi-Band Support**: Supports multiple frequency bands (such as 5.8GHz), matching the frequency range of the TT-VTX to ensure reliable signal reception in various environments.

PACKAGE CONTENTS

- 1x VRX

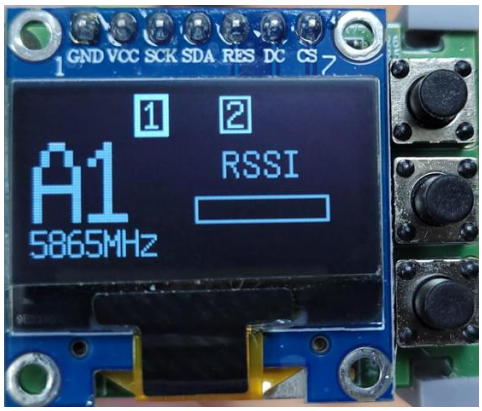
FEATURES

- Dual way working Signal/Diversity
- All frequencies scanning, and result selectable
- Easy and fast way to show wireless information
- Great RX part for FatShark or similar Goggles
- 48ch included RaceBand
- Nice sensitiveness -92dBi
- 5V working, power from goggles
- SMA and RP-SMA versions both available
- Supports customization of both the boot logo and the OLED display.
- Searching mode show you all frequencies working and their strength, and you can select them on the result table. We present all frequencies in order of A-B-E-F-R-M sequent, selected channel has the percentage to show its strength.
  A typical searching result shows: there are 2 signals, and channel ① is most strong. You can press confirm to select it, or you can select channel ② and press confirm to show it
- Main working interface offer abundant information, including: working frequency name (like A1, B1), exact working frequency (like 5705MHz), and signal strength (right-center region), and if you work on diversity mode, there will be current working RX (A or B) just before the strength sign.
- Simple and easy interface way to show you most useful information.
- Easy to use option-select-enter 3 ways button
- Compatible with Fatshark Telepoter V3, Dominatoe V2 & V3 & Sea and Fatshark HD V1, V2 & V3 googgles
- Great 5.8G performance

OPERATION APPROACH

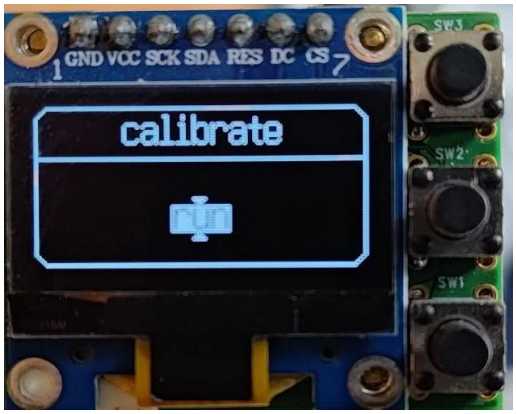
1	Option Button
2	Select Button
3	Set Button

- **Home Page**



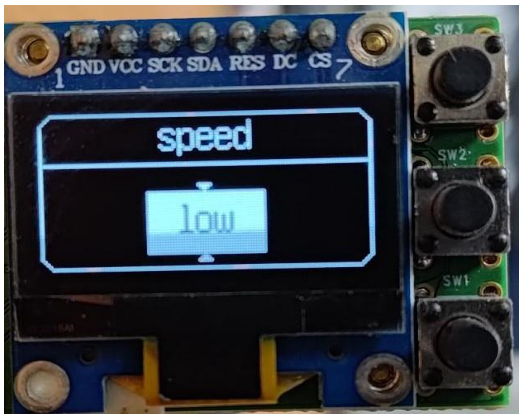
- The left side of the screen shows the currently active channel and its code. There are 48 channel codes available (A1-A8, B1-B8, E1-E8, F1-F8, R1-R8, M1-M8).
- The right side displays the RSSI (Received Signal Strength Indication) for the current channel. The signal strength is shown as a bar, and a full bar means the signal is at its strongest.
- Press **SELECT** button to choose between the primary or secondary channel code. If you want to change the channel code, press **SELECT** button to highlight the code, then press **SET button**.
- Press **OPTION button** to proceed to the next page: "Calibrate".

- **Calibrate**



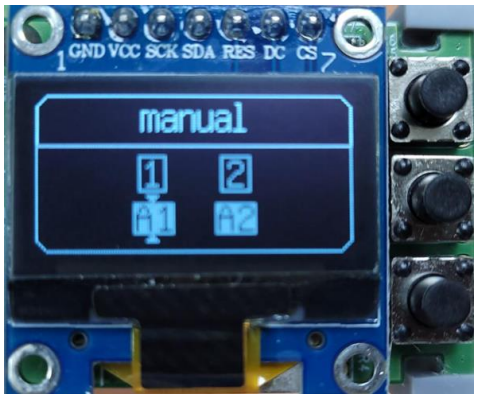
- Press the **SET** button to refresh the primary ① and secondary ② channels. The system will automatically return to the Home Page afterward.
- Press the **OPTION** button to proceed to the next page: "Speed".

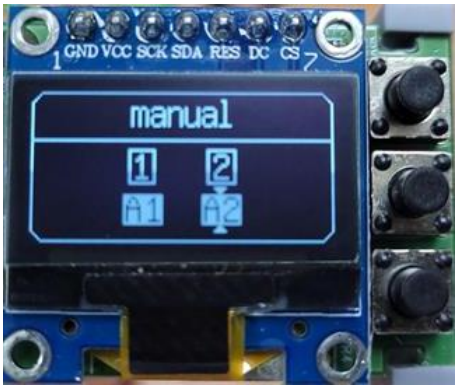
- **Speed**



- Press the **SELECT** button to cycle through three options: Low, Medium, and High.
- Press the **SET** button to set the new calibrate speed.
- Press the **OPTION** button to proceed to the next page: "Manual

- **Manual**



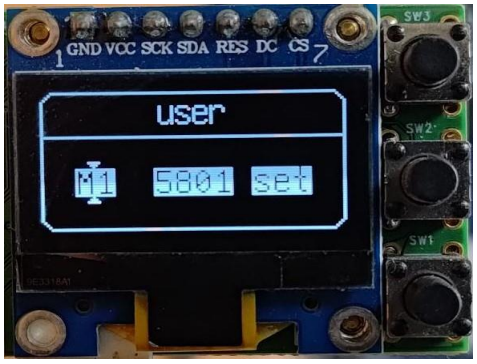


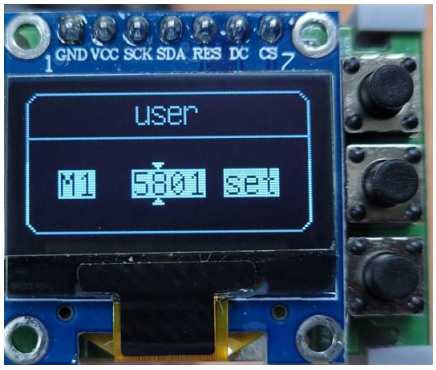
➢ Upon entering the "Manual" page, the cursor will point to the primary ① channel.
  - Press the **SELECT** button to manually set the channel. The 48 available channels will cycle through as you press the button.
  - After selecting a channel, press the **SET** button to update the primary channel.

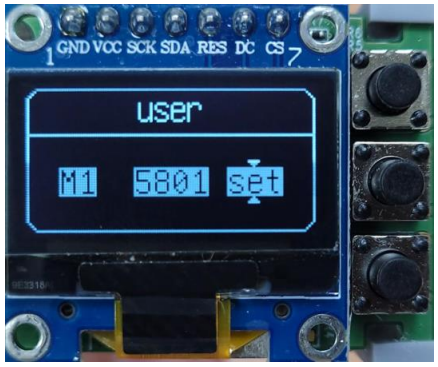
➢ Press the **OPTION** button to switch to the secondary channel selection; the cursor will then point to the secondary ② channel.
  - Press the **SELECT** button to manually set the channel. The 48 available channels will cycle through.
  - After selecting the channel, press the **SET** button to update the secondary channel.

➢ Press the **OPTION** button to proceed to the next page: "User" (User-defined channels)

- **User**







➢ Upon entering the "User" page, the cursor will point to the channel code.

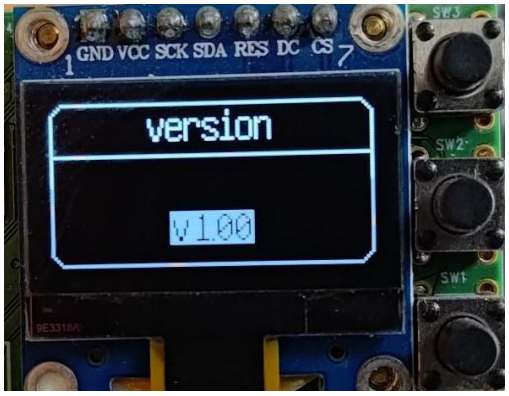
  - Press the **SELECT** button to choose the channel code manually (M1-M8)

➢ Press the **OPTION** button to move sequentially to the middle channel digits settings. (The cursor will move sequentially to highlight the changeable frequency digits).

  - Press the **SELECT** button to choose a digit from 0-9 (The total frequency range is 5000-5999 MHz)

- Press the **OPTION** button to move to the SET location
    - Press the **SET** button to update the settings
- Press the **OPTION** button to proceed to the next page: "Version"

- **System Code Version**



- Press the **OPTION** button to return to the Home Page.

PIN DESCRIPTION

1. Power In(4.5V-5.5V)
2. NC
3. GND
4. NC
5. Audio Out
6. Video Out
7. NC
8. UART TX(reserved)
9. UART RX(reserved)

FREQUENCY TABLE

Channel	1	2	3	4	5	6	7	8
Band A	5865 MHz	5845 MHz	5825 MHz	5805 MHz	5785 MHz	5765 MHz	5745 MHz	5725 MHz
Band B	5733 MHz	5752 MHz	5771 MHz	5790 MHz	5809 MHz	5828 MHz	5847 MHz	5866 MHz
Band E	5705 MHz	5685 MHz	5665 MHz	5645 MHz	5885 MHz	5905 MHz	5925 MHz	5945 MHz
Band F	5740 MHz	5760 MHz	5780 MHz	5800 MHz	5820 MHz	5840 MHz	5860 MHz	5880 MHz
Band R	5658 MHz	5695 MHz	5732 MHz	5769 MHz	5806 MHz	5843 MHz	5880 MHz	5917 MHz
M Band	User-defined*	User-defined*	User-defined*	User-defined*	User-defined*	User-defined*	User-defined*	User-defined*

* User-defined frequency setting is limited to the range of 5000–5999 MHz

Note:

- This product series includes two models with different audio capabilities:

  VRX: Standard model with audio output support

  VRX-NA: Model without audio output support

WARRANTY

The SELLER warrants the **VRX 5.8G FM demodulation FPV Receiver** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the VRX features and specifications is subject to change without further notice.**