Instruction Manual for
URUAV TMX5 Lite

Overview

This 4-in-1 TX module is suitable for FRSKY X-Lite. It integrates four RF chips (CC2500,NRF24L01+,A7105,CYRF6936) into one single circuit board, it supports a variety of remote control protocols, such as S-FHSS, Walkera DEVO, Spektrum DSM2, DSMX, Flysky, Frsky, WLToys, Hubsan, Hisky, Esky , Assan etc. You can control your model flexibility with it, and you will get much excellent experience with you favorite transmitter.

This module is compatible with the Multi-module project on github. It's based on STM32 microcontroller. All available protocols are included in serial mode. In this mode, it uses a serial protocol to communicate with your transmitter. The serial protocol does not require any hardware modifications, but you should update the firmware on your transmitter to the latest. Then the model protocol selection and binding is done from the Model Settings menu on your transmitter.

For telemetry capable transmitters, the telemetry integration is done seamlessly with the transmitter firmware.

Specification

- Brand Name: URUAV
- Item Name: TMX5 Lite
- Operating voltage: 5-9V
- Operating current: <=180mA

- Operating frequency: 2.4G ISM band
- RF power: +22dBm
- MCU: STM32F103CBT6(128K ROM, 20K RAM)
- Weight: 32g

How to use

1. Refer to the website above, update your transmitter with proper firmware.
2. Screw down the antenna of module tightly, and then install TX Module to the module bay of your transmitter.
3. Power on your transmitter, enter Model Settings menu, turn on External RF , and select 'MULT' mode, then you will see the bind and protocol button in the menu, and then you can choose a proper protocol for you model and bind with it now.

LED State

Green LED	Red LED	Status
OFF	Flashing raipidly	Bootloader is running, please wait
ON	ON	Normal or Range Check
ON	Flashing slowly	No serial input
ON	Flashing raipidly	Binding

Notice

1. Make sure to check the 'multimodule' option, when you update OpenTX firmware through Companion software.
2. In serial mode, for FRSKY and S-FHSS protocol, you may need set the value of Fine or Option (in Model Settings menu on your TX) properly to bind with your model. The value can be varied, since it's partly depended on your model.

Package included

- 1 x TMX5 Lite Module

Available protocols (incomplete and expanding)

NO.	Protocol	Sub_protocol	RF Chip
1	FLYSKY	FLYSKY V9X9 V6X6 V912 CX20	A7105
2	AFHDS2A	PWM PPM IBUS SBUS	A7105
3	HUBSAN	NONE	A7105
4	FRSKYV	NONE	CC2500
5	FRSKYD	NONE	CC2500
6	FRSKYX	CH_8 CH_16 EU_8 EU_16	CC2500
7	S-FHSS	NONE	CC2500
8	DSM	DSM2_11 DSM2_22 DSMX_11 DSMX_22	CYRF6936
9	DEVO	NONE	CYRF6936
10	WK2X01	WK2801 WK2401	CYRF6936
11	J6PRO	NONE	CYRF6936
12	ESKY	NONE	NRF24L01+
13	HISKY	HISKY HK310	NRF24L01+
14	KN	WLTOYS FEILUN	NRF24L01+
15	V2X2	V2X2 JXD506	NRF24L01+
16	ASSAN	NONE	NRF24L01+
17	MJXQ	WLH08 X600 X800 H26D E010 H26WH	NRF24L01+
18	YD717	YD717 SKYWLKR SYMAX4 XINXUN NIHUI	NRF24L01+
19	SYMAX	SYMAX SYMAX5C	NRF24L01+
20	SLT	SLT VISTA	NRF24L01+
21	CX10	GREEN _BLUE DM007 JC3015 MK33041	NRF24L01+
22	CG023	CG023 YD829 H8_3D	NRF24L01+
23	BAYANG	BAYANG H8S3D	NRF24L01+
24	MT99XX	MT99 H7 YZ LS FY805	NRF24L01+
25	SHENQI	NONE	NRF24L01+
26	FY326	FY326 FY319	NRF24L01+
27	FQ777	NONE	NRF24L01+
28	HONTAI	HONTAI JJRCX1 X5C1 FQ777_951	NRF24L01+
29	Q2X2	Q222 Q242 Q282	NRF24L01+
30	Q303	Q303 CX35 CX10D CX10WD	NRF24L01+
31	GW008	NONE	NRF24L01+
32	DM002	NONE	NRF24L01+
33	ESKY150	NONE	NRF24L01+
34	CORONA	COR_V1 COR_V2 FD_V3	CC2500