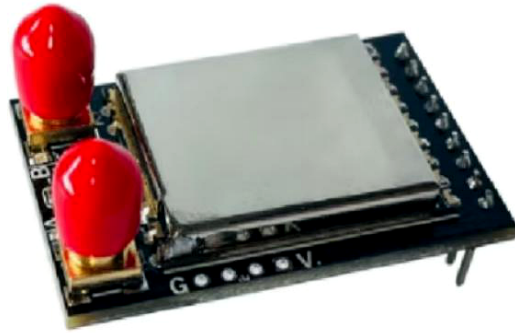


4.9GHz-6GHz VRX Module Quick Manual (RX)



1. Button Control and LED Indicators

Item	Operation	Definition
Red LED	Short press	Channel indicator. Each short press switches to the next channel. The selected channel is shown by the red LED blink count and cycles from CH1 to CH8.
Blue LED	Press and hold for 3 seconds	Band indicator. Each long press switches to the next band. The selected band is shown by the blue LED blink count and cycles through the available bands.
Frequency Memory	Automatic	The module stores the current frequency setting when power is disconnected.
Antenna Connector	-	SMA female connector: external thread with female center contact.

Note: Verify the selected band and channel using the LED blink reference before installation or system testing.

2. Product Description

Category	Parameter	Specification
DC Characteristics	Supply Voltage	5.0V
	Current Consumption	280±40mA
Environmental Specifications	Operating Temperature	-10°C to +65°C
	Storage Temperature	-30°C to +85°C
	Operating Humidity	85%RH
RF Specifications	Receiving Frequency Range	4990MHz-5945MHz
	VSWR	2:1
	Demodulation System	FM/PLL
	IF Frequency	480MHz
	Antenna Input Impedance	50Ω, Typ.
	LO Frequency Stability	±200kHz
	LO Frequency Accuracy	±200kHz
	LO Control	PLL
	Input Leakage	-65dBm
	Receiver Sensitivity	-95dBm
	Input Level Range	-95dBm to +5dBm
Video Characteristics	Video Output Impedance	75Ω, Typ.
	Video Output Level	1Vp-p, Typ.
	Video Polarity	Negative (NEG)
	Video Frequency Response	±5dB max., 50Hz to 6MHz
	Differential Gain	±5% max.
	Differential Phase	±5° max.
	3dB IF Bandwidth	16.5MHz
	S/N Ratio	38dB min.
	RSSI Output Voltage (-30dBm to -90dBm)	1.3V to 0.7V
	Audio Characteristics	Audio Output Impedance
Audio Output Level		1±0.2Vp-p, Typ.
Audio Frequency Range		100Hz to 20kHz
Audio Subcarrier		6.0MHz (AR), 6.5MHz (AL)
Audio Subcarrier Accuracy		±30kHz
S/N Ratio (50Hz to 15kHz)		50dB min.
THD (50Hz to 15kHz, 3Vp-p)		1.5% max.
Mechanical Specifications	Dimensions	44mm (L) x 27mm (W) x 27mm (H)
	Net Weight	20g

3. Frequency Table

Frequencies are listed in MHz.

Band	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
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
Band F	5740	5760	5780	5800	5820	5840	5860	5880
Band R	5658	5695	5732	5769	5806	5843	5880	5917
Band L	5333	5373	5413	5453	5493	5533	5573	5613
Band X	4990	5020	5050	5080	5110	5140	5170	5200
Band H	5653	5693	5733	5773	5813	5853	5893	5933
Band U	5325	5348	5366	5384	5402	5420	5438	5456
Band O	5474	5492	5510	5528	5546	5564	5582	5600

LED Blink Reference

Blue LED	Band A	Band B	Band E	Band F	Band R	Band L	Band X	Band H	Band U	Band O
Blink Count	1	2	3	4	5	6	7	8	9	10

Red LED	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Blink Count	1	2	3	4	5	6	7	8