

FY-605 Data Radio

User's Manual



Dear Customers,

Thank you for purchasing the FY-605 data radio from FeiYu Tech.

In order to achieve full potential and safe operation of this product, please carefully read this manual prior to installation.

1. Parameter Table

	Index	Standard values	Remark
1	Transmission Power	2000mW	
2	Receiving sensitivity	-123dbm	
3	Work voltage	DC5V	DC 5V Power, Current > 2A
4	Transmitting current	<1.5A	
5	Minimum Sleeping current	< 1mA	
6	Carrier Frequency	433MHz	ISM frequency range
7	The conversion time for transceiver	<20ms	
8	Transmission	5Km~15Km	Within the range of visibility, place the antenna higher than 3m.

	distance		
9	Transparent data transmission	Transparent data interface is offered, which can be fit for nonstandard user protocol	Any false data generated in the air can be filtrated automatically (What has been received is exactly what has been transmitted)
10	Baud rate	19200bps	FY-605 provides various baud rate 1200, 2400, 4800, 9600, 19200 and 38400bps.
11	Data buffer	512 bytes	When the RF baud rate is bigger than the COM baud rate, it can transmit unlimited data at one time, and when the RF baud rate is smaller than or was equal to the COM baud rate, may transmit 512 bytes data.
12	Size	91mm*48mm*13 mm	

2、Application Of FY-605

- * AMR Automatic Meter Reading;
- * Wireless alarm and security systems;
- * Wireless conference voting system;
- * Sports training & competition;
- * Wireless dishes ordering;
- * Electronic bus station and intelligent traffic;
- * RF transmitter wireless electronic display screen and queuing machine;
- * Point to multi-point wireless network, wireless on-the-spot bus and automatic data collection system

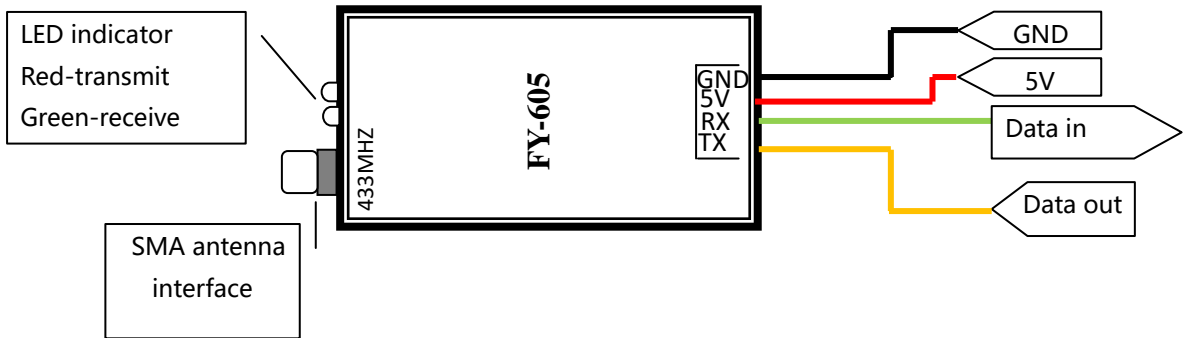
3、Power Supply

5V is the standard power supply.

The user can share power with other equipment, but should select the high quality power supply with desirable ripple factor. In addition, the reliable grounding must be used if there is other device in the system equipment. In case of failure to connect with the earth, it can form its

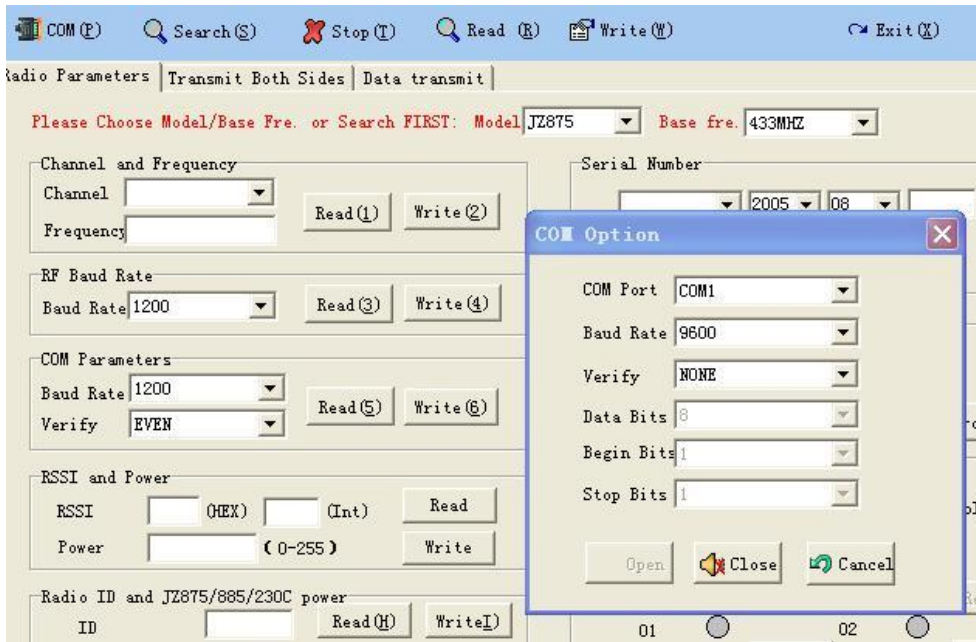
own grounding but it must be absolutely separated from the municipal electric supply.

4、 FY-605 Interface Definition



FY-605 is TTL level, interface default baud rate:19200bps .
Interface verify: None verification

5、 How To Use The Software To Search The Radio And Change The Parameters



- A. Connect FY-605 with the Computer and power, and choose the COM ports.
- B. Search the radio, when search it successfully (the software will clew it), then we can read and write the parameters.
- C. To change parameters, you can choose the parameters you want to set, re-read after set it ok, then you can know whether the parameters is you want.

The default COM and RF baud rate is 19200bps. When the RF baud rate is bigger than the COM baud rate, it can transmit unlimited data at one time, and when the RF baud rate is smaller than or was equal to the COM baud rate, may transmit 512 bytes data.

Note:

1. Two modules communicate or more modules, their frequency and RF baud rate should be the same.
2. Module communicate with User's Equipment, Their COM parameters should be the same.

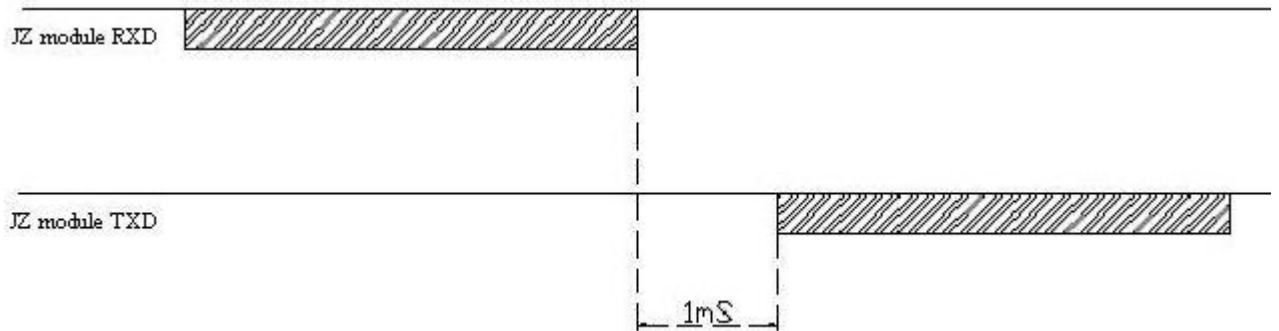
The following table is FY-605's channel and frequency:

Channel	Frequency	Channel	Frequency
1	430.2000MHZ	9	458.5250MHZ

2	431.4288MHZ	10	459.1250MHZ
3	431.7360MHZ	11	459.5250MHZ
4	430.5072MHZ	12	460.1250MHZ
5	434.6940MHZ	13	460.5250MHZ
6	434.2332MHZ	14	461.1250MHZ
7	433.1580MHZ	15	461.5250MHZ
8	433.9260MHZ	16	462.1250MHZ

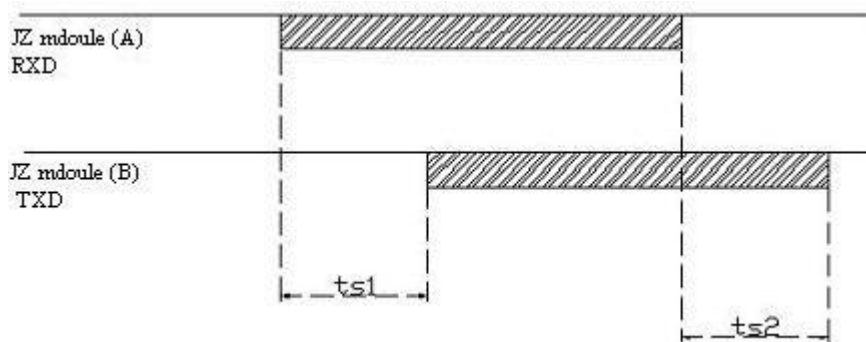
6、 The Conversion Between Transceiver Modules

It needs 1 ms time delay after the user's equipment received the data and then transferred the send data.



7、 Transmitting From A Module, Received By B Module

When transmitting data, the user should consider the time delay, in order to ensure the reliability of wireless communication; we joined the FEC (wrong before) and other coding rules. In that case, the communication delay is related to baud rate, the following is details:



COM baud rate (Bps)	Time ts1 (ms)	RF baud rate (Bps)	Time ts1 (Ms)
38400	11	4800	43
19200	15	2400	83
9600	25	1200	140

8、 Interoperable Models

FY-605 can communicate with all the FY-602 series models. Please kindly pay attention to the following points when transmitting:

- A. Select all the modules the same channels.
- B. All the modules with the same RF baud rate.
- C. Connect the power supply and interface well.

9、 Lamp Description Of Normal Working

The module has a two-color work lights; the red lamp glitters twice when connect the power supply, the red lamp glitters when transmitting data, and the green lamp glitters when receiving data.

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Note: We reserve the right to change this manual at any time! And the newest edition will be shown on our website www.feiyu-tech.com.