

## 2KM Long Range RF link kits w/ encoder and decoder



This is a super long-range 433mhz RF link kit. It comes with VCO, PLL technology, steady frequency and super anti-jamming ability. You can directly use it with your projects, like wireless data transport, remote control, etc.

### Specifications

Parameter	Value
Working voltage	Receiver(3-5V), Transmitter(3-9V)
Working current	≤2.5mA(5.0VDC)
Principle of operation	Superhet (VCO, PLL)
Modulation	OOK/ASK

Parameter	Value
Working band	433.92MHz (customized service available)
Bandwidth	1.5MHz
Sensitivity	-105dBm (50Ω)
Rate	< 5Kbps
Decoding form	PT2272
Antenna length	18cm
Transmission range	2 km

## Application Ideas

- Wireless switch
- Remote transmission
- Wireless control

## Hardware Overview

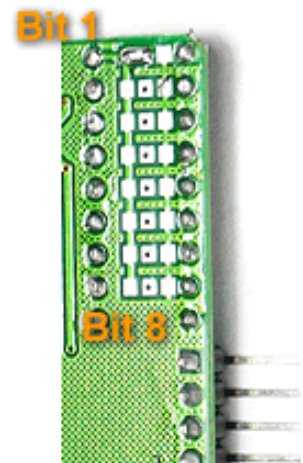


**Transmitter**

Three state for each coding bit, solder corresponding bit for pairing.

### Example:

- Float, do nothing
- High, solder pin to the left pad
- Low, solder pin to the right pad

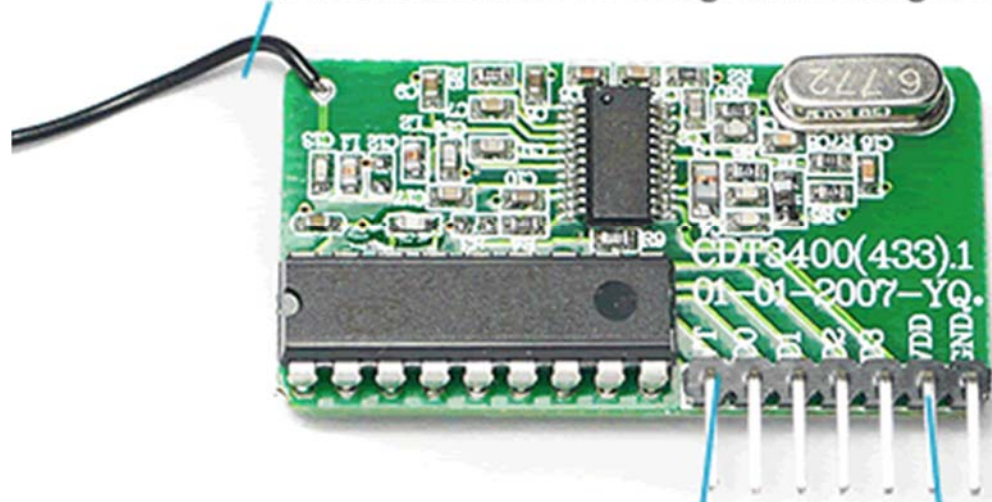


**Receiver**

**Explanation on coding.**



4. Antenna should be straighten during usage.

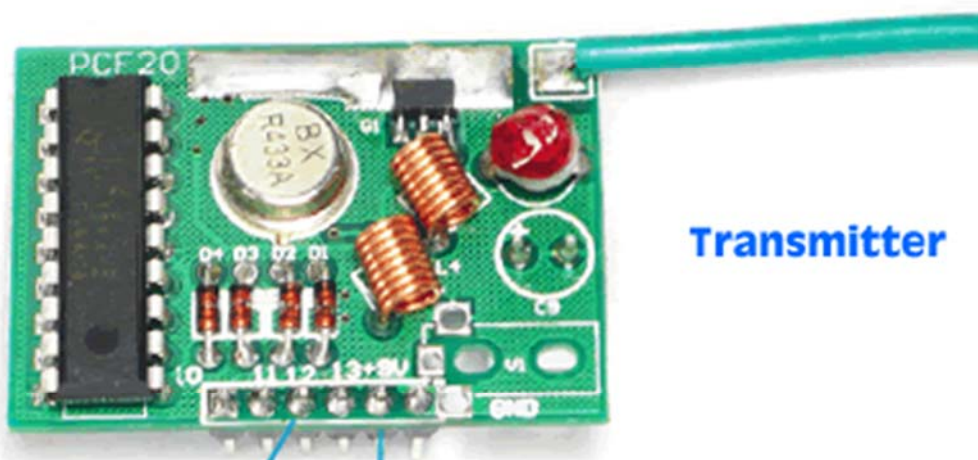


**Receiver**

1. VT Output high when signal received.

2. Data output same as transmitter input

3.VDD 5V



**Transmitter**

From left to right: D1, D2, D3, D4

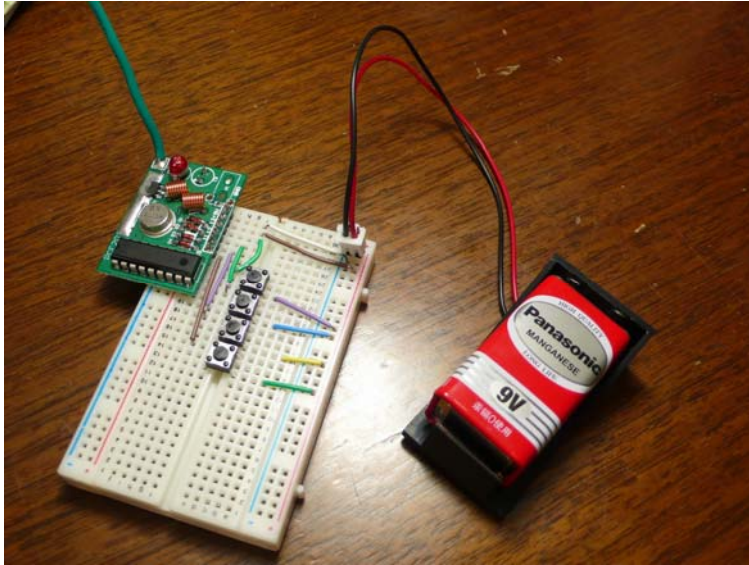
Vcc 5VDC

**Wiring Scheme**



## Getting Started

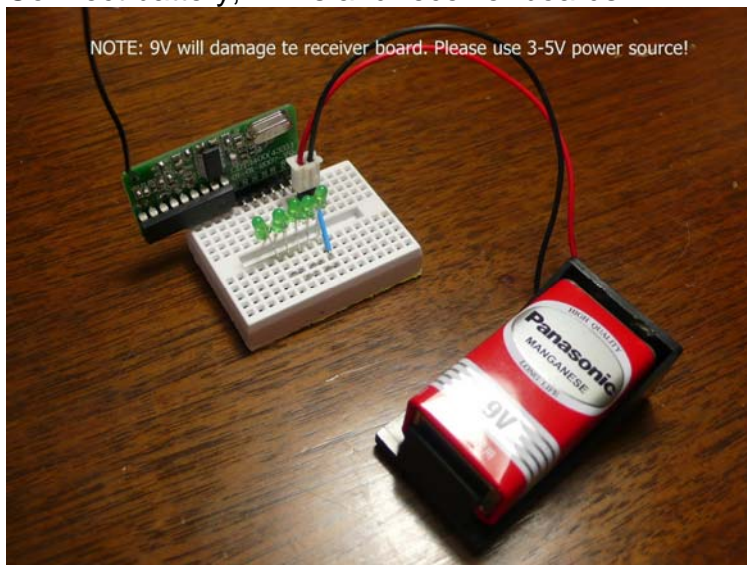
- Please follow the [Instruction](#) to hook up the communication system.
- Connect battery, button and transmit boards.



### Note

Please use 3-5V power source! 9V will damage the receiver board.

Connect battery, LEDs and receiver boards.



### Note

Do not put RX module and TX module too close: this would prevent them to work. Make sure that the RX module and TX module are at least 1 meter away from each other.

- When we press the button on the Transmitter side, the related LED on receiver side will be turned on.

## Resources

- **[Instruction]** [Transmitter and receiver Setup Manual](#)

[https://github.com/SeeedDocument/2KM\\_Long\\_Range\\_RF\\_link\\_kits\\_w\\_encoder\\_and\\_decoder/raw/master/res/2KM\\_RF.rar](https://github.com/SeeedDocument/2KM_Long_Range_RF_link_kits_w_encoder_and_decoder/raw/master/res/2KM_RF.rar)

- **[Datasheet]** [Datasheet for PT2272 and PT2262](#)

<http://www.datasheetcatalog.org/datasheet/PrincetonTechnologyCorporation/mXusxsq.pdf>

## Tech Support

Please submit any technical issue into our [forum](#) or drop mail to [techsupport@seeed.cc](mailto:techsupport@seeed.cc).