

YK04 Introduction

YK04 is designed with RF integrated circuit, has internal VCO and PLL circuit, stable frequency, high sensitivity, strong anti-interference ability, and can be directly used with decoding IC. It is widely used in wireless data transmission wireless remote control and other fields.

1. Scope of application:

- 1) Wireless access control system
- 2) Various types of anti-theft systems
- 3) Industrial remote control, telemetry, remote sensing
- 4) Low baud rate data transmission
- 5) Other wireless remote control

2. Technical parameters:

Working voltage (V): DC5V

Quiescent current (mA): 4.5MA

Modulation method: amplitude modulation (OOK)

Working temperature: $-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$

Receive sensitivity (dBm): -105DB

Operating frequency (MHz): 315, 433.92MHz (optional)

Coding method: pad code (fixed code)

Working mode:

M4 (jog: press and hold without releasing the hand, stop the output when one is released)

L4 (interlock: four channels can only have one output at the same time)

T4 (self-locking: four independent outputs, not mutually Impact, press the output and press again to stop output)

3. Product Features:

The super-regeneration receiving module adopts an LC oscillating circuit, which includes amplification and shaping, and the output data signal is a decoded high-level signal, which is extremely convenient to use and low in price, so it is widely used. With four-channel decoding

output (also can be changed to six-way jog or interlock output), easy to use; easy to debug frequency, short lead time; good product quality consistency, cost-effective.

The receiving module has a wide receiving bandwidth, generally $\pm 10\text{MHz}$, and is generally adjusted to 315MHz or 433.92MHz at the factory (if there are special requirements, the frequency can be adjusted, and the frequency adjustment range is 266MHz~433MHz.). The receiving module is generally powered by DC5V, and the voltage range can be adjusted if there are special requirements.

4. Foot position and instructions for use:

- 1 VT output status indication
- 2 D3 data output
- 3 D2 data output
- 4 D1 data output
- 5 D0 data output
- 6 5V power supply positive
- 7 GND power supply negative
- 8 ANT connected to the antenna

The receiving module has a total of eight external interfaces, which are shown in English. "5V" means the positive pole of the power supply, "D0, D1, D2, D3" means the output, "GND" means the negative pole of the power supply, and "ANT" means the antenna end.

Connect a 50 ohm 1/4 wavelength antenna before use, and the antenna should be straight for optimal reception, wavelength = speed of light / frequency.

5. Remarks:

The VCC voltage should be consistent with the operating voltage of the module, and the power supply must be filtered.

The antenna has a great influence on the receiving effect of the module. It is better to connect the 1/4 wavelength antenna. Generally, a 50 ohm single-core wire is used. The length of the antenna is about 23 cm for the length of 315 M, and about 17 cm for the 433 M.

The position of the antenna also has an effect on the receiving effect of the module. When installing, the antenna is as straight as possible, away from the shield, high voltage, and the source of the interference.

When used, the receiving frequency and decoding mode should match the transmission.