

# Manual

## Specifications:

Product name: remote control

Wide operating voltage range +2.6V~+3.6V

Wide operating frequency range 433.92MHz

The current consumption is less than 1uA in shutdown mode, and the current is less than 15mA in transmitting state.

Antenna gain 0dB

Modulation method ASK

Operating temperature range -15 °C ~ +60°C

External crystal oscillator 13.560Mhz when working

## product description:

remote control is a low-power, high-performance 433.92MHz short-range wireless communication transmitter circuit that supports ASK modulation. All of its tuning can be automatically completed in the WL4455 chip. Circuits such as PLL and power amplifier are integrated on-chip.

The WL4455 integrates a PLL and power amplifier on-chip. The PLL provides a carrier signal for the transmitter. The operating frequency of the PLL in the WL4455 uses the local oscillator signal provided by the ring oscillator. A fixed frequency divider circuit is used in the loop. And built-in loop filter, the overall power consumption is controlled below 1uA in the standby state. The power amplifier amplifies the input signal with an open-drain output and an external choke inductor structure. The output adopts a  $\pi$ -type narrowband matching network to improve harmonic suppression.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.