

The circuit of remote controller composes the following main eight parts

1. **POWER SUPPLY:** Containing a grain of alkalescency battery which voltage is 12V and model is 23mA; it provides essential voltage for the whole circuitry.
2. **MAIN CIRCUIT:** It composes of coding IC and peripheral components.
3. **KEYBOARD:** It composes two buttons (and can be built up of four buttons if requested) and it is provided to consumer to use.
4. **LED INDICATOR:** Red LED, to indicate working state.
5. **ADDRESS CODE:** It composes of eight groups of PCB jumper and its function is to set address coding of remote controller.
6. **CRYSTAL:** It contain one 315MHz crystal size, providing RF operating frequency.
7. **RF CIRCUIT:** It composes of RF vibratory circuit and magnifying circuit.
8. **ANTENNA:** It composes of harmonic wave filter, impedance matching and collapsible radio mast (antenna).

Operating principle:

When any key of the KEYBOARD is pressed, it shall touch of MAIN CIRCUIT to work;

Then MAIN CIRCUIT will send signal to the LED INDICATOR, red LED will shine and it indicate begin working state;

On the same time, one time MAIN CIRCUIT distinguish the KEY value of the pressed button and the other side it read the address coding which are set by ADDRESS CODE and then make these information to code (CODE), When RF CIRCUIT receive the code, one side the CRYSTAL circuit begin to work and vibrate to produce 315MHz operating frequency, on the other side, RF CIRCUIT make ASK modulating, magnifying and then radio frequency signal drive ANTENNA emission circuit, after ANTENNA circuit carry essential harmonic wave filter and impedance matching, at the last the radio frequency signal carrying coding information is radiated all around with 315MHz wireless electric wave by collapsible radio mast antenna; When the receiver receive the signal, it will make essential decode, address-identify and order-identify, finally it perform controlling operating relative to the button of remote controller.