

Users guide

This product use 2.4G radio frequency technology, applied for polling, voting, training, education, quiz... etc.

One complete system includes software and hardware. Hardware includes receiver, keypads and cable.

Receiver:



Dimension(mm):137×137×50, half ball

Weight: 0.5 kg

Working temperature:0-40 °C

Working relative humidity:0-90%

Working Power consumption: 5W

Receiving angel and distance for receiving: 360degree.

Function: connect to PC, receiving the signals from the keypads

Functions of the receiver parts:

1. Power indicator light (red): power on, light on; power off, light off;
2. Communication indicator light (yellow): when the receiver gets the order from the PC, light on;

3. Status indicator light (blue): when the receiver is activated, light on.
4. Connection port: used for connect cable.
5. JP1 is the port for RJ-45 standard network card, use standard cable to connect to the USB port of PC.

U2-U5 are WM2500LP(RF CHIPSET:CC2500)2.4G radio frequency mould, they are used for transmit and receive radio signals from the keypads. SN75179 is difference driver receiver and transmit IC. U7 is 24c serial memorizer, which connected to CUP P89LV51RD2BN via data timer cable. 24.576M Crystal oscillator X1 support the timer signal for CPU P89LV51RD2BN. CPU P89LV51RD2BN controls the working mode of every mould, operating the orders from the computer, and transmits or receives via moulds. P89LV51RD2BN send the signals which have been disposed to the computer. The receiver only one working mode is 4 modules transmit and receive simultaneously. these 4 RF modules and 4 antennas own the exactly same specification and RF parameters.

Keypads



1 Specification

Dimension: 5.3cm*11.6cm*1.5cm

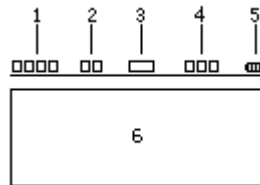
Transmitter angle: 360 degree

Batteries: 2 AAA ordinary batteries or alkaline batteries

Function: voting or answering, sending signals to receiver

2. Functions of the keypads' parts:

2.1 LCD display area (as pictures below)



2.1.1 Keypads ID display, from 0001 to 9999

2.1.2 Capital / lowercase input indicator

2.1.3 status indicate: "✍" inputting or editing, "--" Stop answering, ">>" sending signals, "OK" proceedings (sending signals) successfully, "⊙" proceedings (sending signals) failed, "✖" no connection with the receiver, "○" Searching the signal of the receiver

2.1.4 Working mode indicator

2.1.5 power volume indicator

2.2 Buttons area (details and name of the button may be different printed for different mould)

Includes function button, input button and combination button

2.2.1 Function buttons

Ok: confirm sending or handling

C: clear signals or cancel

< , > : left, right, up, down, forward, downward

Power button: power on/ off, capital/lowercase input

Input buttons: 1-10, A-I, symbol

 ,  and  : Agree, objective and abstain

Fn combination button

Cable



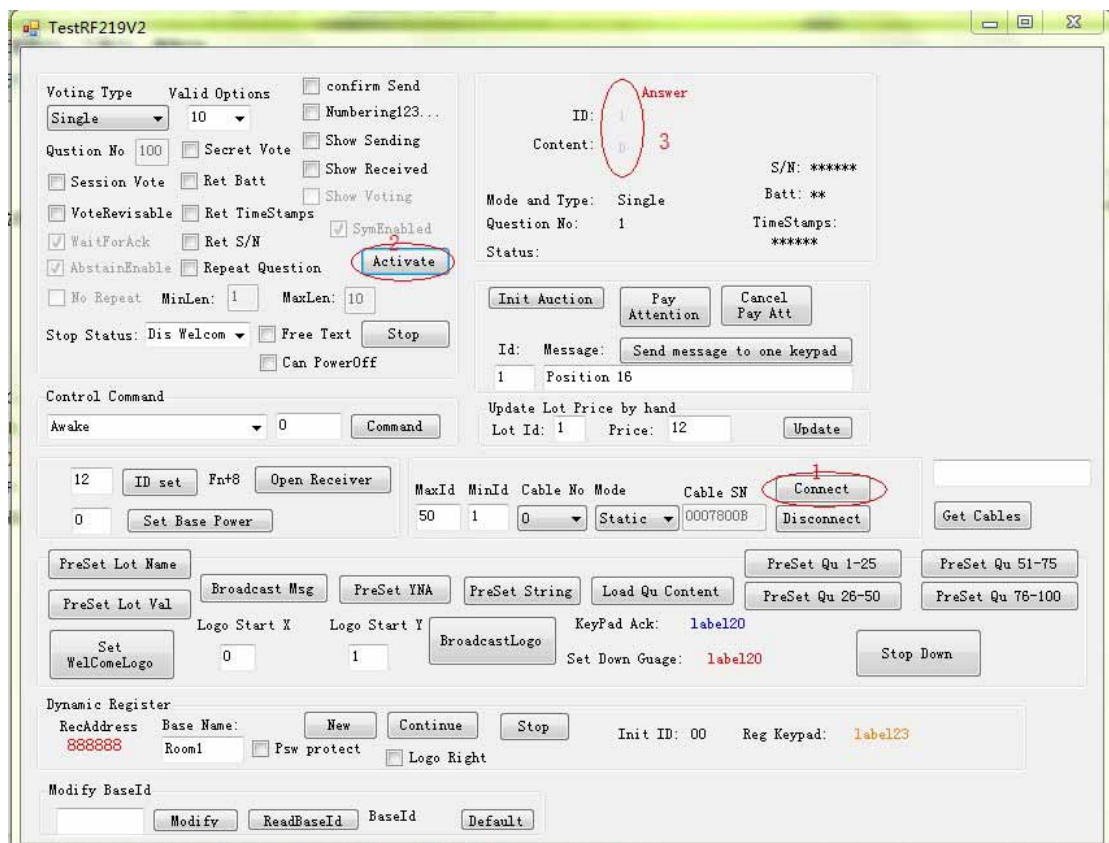
For getting power from PC;

For data communication with receiver and PC

One port is RJ45, another port is USB port.

Test method:

1. Connect the cable to the PC, the system will install USB driver automatically;
2. Open the test software: “WindowsApplication1.exe”, as below:



3. Press the red circled button of 1 and 2 by order, the system will prompt the word “ok”, confirm it, then the green light of the receiver will flashing.
4. After pressing the power key on the keypads, it will search the signals of the receiver automatically. Press the buttons one by one, and you will find the result of the receiver got at the red circle 3.

FCC Certification Requirements

Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications 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.

IC NOTE:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.