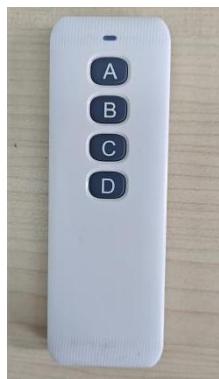# Long Range Remote Control and Receiver With LORA Technology

Model: RC-HPRC-14-LORA & JS-SM18-LORA

The devices adopting the LORA spread spectrum technology, which significantly enhances the transmitting distance, power density, and anti-interference performance, can be used for super long distance remote control operations in various industrial automation, agricultural automation, and home automation, such as home, factory, house, farm, pasture, vehicle, ship, offshore operations, aerial vehicle, field call, etc.

They can remote control various equipment on the land, water, and air, such as gate opener, window opener, security alarms, lights, locks, motors, fans, winches, blinds, business signs and various devices.

Parameter

Product	Long range remote control
Model	JJ-RC-HPRC-14-LORA
Technology	LORA
Work voltage	2.2-3V (Battery 2x AAA)
Frequency	490MHz
Work current	<110mA
Button	4 Buttons

Product	Long range receiver
Model	XH-SM18-LORA
Technology	LORA technology
Work voltage	12-24V DC/AC
Work current	40-120mA
Channel	3 Channels
LORA frequency	490MHz
Code capacity	Max 100pcs
Work distance	1000m

Operation instruction

- **Factory defaults the N is 1 , 2 or 3.**
- **Two way communication:** Press the remote's button once to transmit a code. The red light of the remote will light up for a short while. If the receiver receives the signal, it will send back a signal as feedback to the remote control. And the

green light on the remote control will blink quickly for a while to indicate that the receiver has been controlled. Otherwise, the red light will turn on and off means the receiver has not received any signal.

● **Low battery reminder for the remote:** When the remote control transmits codes and the work voltage be detected to below 2.5V, the red light will flash to indicate low battery power.

1. How to program the remote into receiver in the momentary mode

(Factory defaults N=1 means Channel 1, N=2 means Channel 2, and N=3 means Channel 3)

Step 1. Press the SW1 with **"N" times**, the red light will flash **"N" times** and light on, and enter the learn code of the momentary mode for the **Channel "N"**.

Step 2. Press the button on the remote control. If the learn code operation is successful, the red light will flash. Otherwise, after 5 seconds if the operation is failure, the device will exit the learn code mode.

For example, program the remote control button A into the channel 1.

Step 1. Press the SW1 **once**, the red light will flash **once** and light on, and enter the learn code of the momentary mode for the **Channel 1**.

Step 2. Press the button A on the remote control. If the learn code operation is successful, the red light will flash. Otherwise, after 5 seconds if the operation is failure, the device will exit the learn code mode.

Note! Program the Channel 2 and channel 3, please follow the instruction and repeat the above operation.

2. How to program the remote into receiver in the latching mode

(Factory defaults N=1 means Channel 1, N=2 means Channel 2, and N=3 means Channel 3)

Step 1. Press the SW2 with **"N" times**, the blue light will flash **"N" times** and light on, and enter the RF latching code mode for the **Channel "N"**.

Step 2. Press the button on the remote control. If the learn code operation is successful, the blue light will flash. Otherwise, after 5 seconds if the operation is failure, the device will exit the learn code mode.

For example, program the remote control button A into the channel 1.

Step 1. Press the SW1 **once**, the red light will flash **once** and light on, and enter the learn code of the momentary mode for the **Channel 1**.

Step 2. Press the button A on the remote control. If the learn code operation is successful, the red light will flash. Otherwise, after 5 seconds if the operation is failure, the device will exit the learn code mode.

Note! Program the Channel 2 and channel 3, please follow the instruction and repeat the above operation.

3. Delete the remote control

Press and hold the SW2 for about 5 seconds, the blue light will flash 3 times, which means the delete code operation is successful. All the codes were deleted.

4. Relay output timer in momentary mode

Factory defaults press the SW1 with "N" times, every time will increase 1 second. Max timing is 6 seconds.

Step 1. Press and hold the SW1 for about 5 seconds, the red light will flash once.
Step 2. Press the SW1 with "N" times and release it, the blue light will flash "N" times and light on.

Note!
Momentary mode: Press the remote control, the relay of receiver is triggered, relay then will automatically release after the working time has reached on the momentary mode.
Latching mode: Press the remote control, it will reverse the status of relay output. Each press of the remote control will switch the relay output status "close-open-close......"