

## The remote control RMX Instruction Manual

### Main features

1. Wireless IR remote control can set up the CM series product one to one.
2. The data communications base on the multiple handshake protocol and compression algorithm which made the data transfer fast and accurate.
3. Work on two batteries (Model: AA).
4. LCD indicator showed the parameter and data.
5. The remote control will enter intelligent sleep state after One min no any operate, and press any key to resume.
6. Low-energy sleep mode, less than 0.2uA.
7. Fast wake-up function.
8. Battery capacity indicator.
9. Emergency light and hazard lights.
10. with ergonomic design, suitable for the hand-held operation.

### Panel graphics



### Key operate instruction

KEY	Key name	Executive function	Long press key function

Setting area	+	A、 menu page down B、 increase the setting data	Continuous increase the setting data	
	-	A、 menu page up B、 decrease the setting data	Continuous decrease the setting data	
	set	Parameter setting	-	
Functional area	Send		Working parameter send	-
	receive	state	Running state received	-
		parameter	Working parameter received	-
	Test		Send the test order	-
	Backlight		Backlight on	-
Light		A、 the emergency light on B、 switch the hazard light	Combine with "+"key to lock the parameter	

### The parameter setting

Item	Name abbreviation	data scope	Name describe	step-length	unit	Factory Default
a	<b>1st time</b>	0 ~ 15H	The first working time	1H	hour	4 hour
b	<b>1st power</b>	0 ~ 100%	The first working time power	10%	Power (percentage)	100%
c	<b>2nd time</b>	0 ~ 15H	The second working time	1H	Hour	0 hour
d	<b>2nd power</b>	0 ~ 100%	The second working Time power	10%	Power (percentage)	70%
e	<b>3rd time</b>	0 ~ 15H	The third working time	1H	Hour	4 hour
f	<b>3rd power</b>	0 ~ 100%	The third working Time power	10%	Power (percentage)	50%
g	<b>Mor time</b>	0 ~ 15H	Lighting time in the morning	1H	Hour	0 hour
h	<b>Mor power</b>	0 ~ 100%	Lighting power in the morning	10%	Power (percentage)	30%
i	<b>L-Con-V</b>	5 ~ 11V	Light control voltage	1V	Volt	5V
j	<b>L-Con-DT</b>	5 ~ 50Mins	Light control delay time	5M	Min	5min
k	<b>L-Current</b>	0.15~ 3.42A	LED load current	0.03A	A	0.30A
l	<b>L-On-EN</b>	0 ~ 1	Lights on every night	1	0: Off 1: On	1

m	<b>Smart Power</b>	0 ~ 1	Smart power control	1	0: Off1: On	0
n	<b>Over-DV</b>	9.8 ~ 11.8V	over-discharging protected voltage	0.2V	Volt	11.0V
o	<b>Over-DRV</b>	12.0 ~ 13.0V	over-discharging recover voltage	0.2V	Volt	12.6V
p	<b>Boost-CV</b>	14.2 ~ 15.0V	Ascending charging voltage	0.2V	Volt	14.4V
q	<b>Float-CV</b>	13.2 ~ 14.0V	Float charging voltage	0.2V	Volt	13.8V
r	<b>Re-Def</b>	0 ~ 1	Return to default value	1	1: On	-

### Instruction

1. Install Battery: please install two batteries (Size: AA). Pay attention to the "+" and "-", in case of reverse connection.
2. The boot process: press any key to starting up, then the remote control be rouse and executive the function under the key u press.
3. Power off: System will power off automatically then enter intelligent sleep state after 1min later no any operate.
4. Browse the parameter: after power on, press "+" and "-"key can browse the parameter preset before.
5. Modify the parameters: Browse to the parameter which u want to set, press "set" key, the data begin flash, then press "+" and "-"key to adjust. Setting over, press the "set" key to confirm.
6. Sending parameter: After all the parameters are set up, aim at the solar charge controller and press the "send" key. If sending successfully, three LED lights of the controller will flash, at the same time the remote control will keep a long sound; If failed, the remote control will keep three short sound and prompt delivery failure.
7. Read the state: aim at the solar controller and press the "state" key, the remote control will read the running state of the controller, If reading successfully, the remote control will keep a long sound and store the data; If failed, the remote control will keep three short sound and will show the old status.
8. Read the parameter: aim at the solar controller and press the "parameter" key, the remote control will read the setting value of the controller. If reading successfully, the remote control will keep a long sound and store the data(if press the "send" key now, the store parameter will be send immediately) ; If failed, the remote control will keep three short sound and will show the parameter which u are in setting.
9. Backlight: Press the "backlight" key, the backlight of the LCD will be on which suitable use in poor light.
10. Light: Press the "light" key, the emergency light will be on. Press again will switch to the hazard light. Press the key the third time, the light will be off.
11. Test: Aim at the solar controller and press the "test" key, the load will be on, then the power of the load will match with the remote control. Press the "test" key several times, the output power of the load will range to 100%,70%,50%,30%,0%.The controller will work on 1min under the test mode, after 1 min will enter the normal work mode.
12. Lock key: Press "+" and "light" key at the same time more than 3s,the remote control keep two

short sounds, then the "set" and "Parameter" key will be lock to prevent carelessness ensure the correct value. Press the "+" and "light" again at the same time more than 3s to unlock.

13. The remote control setting up the solar charge controller one to one. Could not set up several controllers at the same time.
14. Open the backlight the lights will decrease the battery energy.
15. When appear the low power sign, please replace the battery in time.
16. When out of service for long period, the battery should be taken out.

### Running status

Item	Name abbreviation	Name describe	Unit	Describe
a	<b>System-State</b>	Display the system state currently remark 1	-	-
b	<b>Battery Volt</b>	Currently battery voltage	V	Volt
c	<b>Load Volt</b>	Currently load voltage remark 2	V	Volt
d	<b>Temp</b>	Currently ambient temperature	℃	Centigrade
e	<b>Run-Day</b>	<b>Total running days</b>	D	days
f	<b>Over-D- T</b>	<b>Battery over-discharge times</b>	N	days
g	<b>C- Fully -T</b>	Charge the battery fully times	N	days
h	<b>Today- HV</b>	Today highest voltage	V	Volt
i	<b>Today- LV</b>	Today lowest voltage	V	Volt
j	<b>1-Ago- LV</b>	A day ago lowest voltage	V	Volt
k	<b>1-Ago- HV</b>	A day ago highest voltage	V	Volt
l	<b>2—Ago- LV</b>	Two days ago lowest voltage	V	Volt
m	<b>2- Ago- HV</b>	Two days ago highest voltage	V	Volt
n	<b>3-Ago- LV</b>	Three days ago lowest voltage	V	Volt
o	<b>3-Ago- HV</b>	Three days ago highest voltage	V	Volt
p	<b>4-Ago- LV</b>	Four days ago lowest voltage	V	Volt
q	<b>4-Ago- HV</b>	Four days ago highest voltage	V	Volt
r	<b>5-Ago- LV</b>	Five days ago lowest voltage	V	Volt
s	<b>5-Ago- HV</b>	Five days ago highest voltage	V	Volt
t	<b>6-Ago- LV</b>	Six days ago lowest voltage	V	Volt
u	<b>6-Ago- HV</b>	Six days ago highest voltage	V	Volt
v	<b>7-Ago- LV</b>	Seven days ago lowest voltage	V	Volt
w	<b>7-Ago- HV</b>	Seven days ago highest voltage	V	Volt
x	<b>Pro -Date</b>	Date of production	-	-
y	<b>Model</b>	Product model	-	-
z	<b>Version</b>	version number	-	-

Remark 1: The system state shows "E-LED" means that the Load was short circuit or open circuit.

Remark 2: The load voltage means that the voltage of positive pole between load and battery, when the load working normally, this voltage is equal to both ends of the load voltage.

### Sign instruction

						
Remote control energy	sending	Send successful	Send failed	Test mode	Key lock	Key unlock

### Hummer respond

Hummer respond	Instruction
--- (three short sounds)	Send failed
— (a long sound)	Send successful
—— (two long sounds)	Return to default value
-- (two short sounds)	Key lock
- (a short sound)	Lock release

### Technical parameters

Battery model	(AA) × 2pcs
power supply voltage	3.0V
Effective distance	<5m
power consumed of sleep mode	<0.2uA
Normal power consumed	5mA
Send instant power consumed	<50mA
Light consumption	12mA
Backlight consumption	15mA
Size	122mm×61.5mm×22mm (L×W×H)
Weight	60g (without the battery)
Auto power off time	1 min
Backlight time	10 S
Lighting time	10 S
2000mAH battery setting quantity	50000 pcs (back light and lights both are closed)
Working temperature	-25℃ ~ 55℃