

UPS USER MANUAL

Product Model: 1K/1KS/2K/2KS/3K/3KS

Notes:

- ☆ Please consult with professional dealers or maintenance centers, while not to repair arbitrarily UPS with high voltage to endanger the life safety when any problems appear.

1.Unpacking and Inspection:

- 1).Open the package and check the accessories, which should include user manual, guarantee card, power cable, communication cable (optional),charging cable(extended-time UPS only).
- 2).Make sure whether the model is what you want or not. You can confirm by checking MODEL NO. of the rear panel.

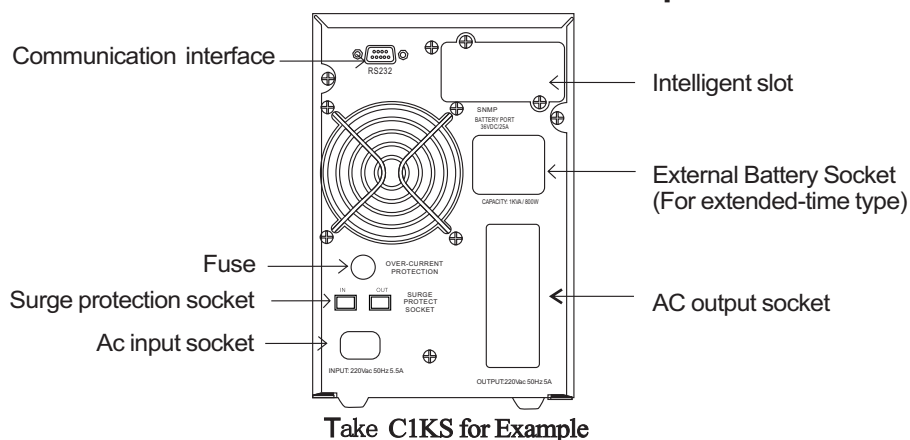
■ MODEL NO.

MODEL NO.	UPS MODEL	MODEL NO.	UPS MODEL
C1K	Standard Model	C1KS	Extended-time
C2K	Standard Model	C2KS	Extended-time
C3K	Standard Model	C3KS	Extended-time

2.Installation Precaution:

- 1).UPS should be placed in the ventilated & clean area, where keeps away from water, combustible gas and corrosives.
- 2).The environmental temperature should be kept in the rang of 0 °C ~ 40 °C.
- 3).If UPS is unpacked in a low temperature, it may be condensed with water drops, please install and operate the machine after the outer and inner of it are completely dry to avoid electric shock.

3.Overview of UPS Connection & Operation:



Appendix 2. Product Performance

Electric Performance							
Model	1K	1KS	2K	2KS	3K	3KS	
Load capacity	700W / 800W		1400W / 1600W		2100W / 2400W		
Rated Voltage	220 / 230 VAC						
Rated Frequency(Hz)	50/60Hz						
Input							
Voltage(Single phase)	110 ~ 300 VAC						
Frequency	45~65Hz						
Output							
Voltage tolerance	220 / 230VAC ± 3%						
Frequency tolerance (Battery Mode)	50/60Hz ± 0.5%						
THD (Full Load)	Linear Load	< 3%					
	Non-linear Load	< 6%	< 6%	< 6%	< 6%	< 6%	
Over capacity	> 105% → 30s						
	> 130% → 200 ms						
Crest Ratio	3:1(max)						
Battery Voltage							
Battery voltage	24/36VDC	36VDC	48/72VDC 96VDC	72/96VDC	72/96V DC	96V DC	
Battery Configuration	12V 7AH(9AH)	External Battery	12V 7AH(9AH)	External Battery	12V 7AH(9AH)	External Battery	
Transfer Time							
Main Mode ⇌ Bypass Mode	<4ms (Standard time 2. 5ms)						
Main Mode ⇌ Battery Mode	0 ms						
Working Environment							
Temperature	0 °C ~ 40 °C						
Humidity	0 ~ 95% (non-condensing)						
Altitude	<1500M						
Storage Temperature	-25 °C ~ 55 °C						
Mechanical Performance							
Dimension W*D*H(mm)	145 × 405 × 220		195 × 465 × 345		195 × 465 × 345		
Weight (KG)	Net weight	10.5	6.5	22.5	12	27.5	12.5
	Gross weight	11.5	7.5	24	14	29	14.5

Main button: Press the button " | " for one second to turn on UPS
 Press the button " ↓ " for one second to turn off UPS.

Bypass indicator shining indicates that the load power is supplied from main through bypass.

Inverter indicator shining indicates that UPS output power to load from inverter.

Battery indicator shining indicates that UPS output power to load from battery.

Fault indicator shining indicates that UPS is in abnormal condition.

Load indicator (Battery capacity indicator) indicates bar-type show, load value and battery capacity percentage.

Indicator explanation as follow: (from bottom to top)

Main Mode

LED	Load Capacity Percentage
LED 5	More than 100%
LED 4	76~100%
LED 3	56~75%
LED 2	36~55%
LED 1	1~35%

Battery Mode

LED	Battery Capacity Percentage
LED 5	0~35%
LED 4	36~55%
LED 3	56~75%
LED 2	76~100%
LED 1	100%

6.Operation

After connecting the main, press "turn-on button" for over one second to turn on UPS.

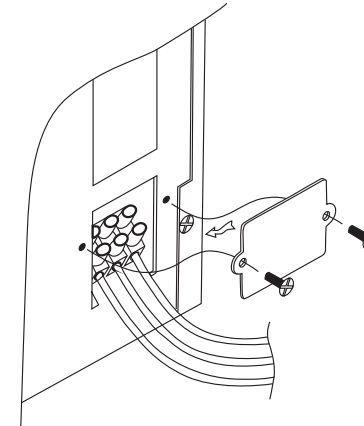
Warnings

The UPS is qualified as class-A product. The product may lead to radio Jamming in the living environment. With such a condition, users need to adopt some workable measures for distraction.

1. To connect UPS input cable to the main, while output socket connects the load. The total output power should not be more than 1KVA/0.8KW,2KVA/1.6KW,3KVA/2.4KW.

2. Besides a socket output, C3k(s) also provides a terminal-strip output. The procures of cable matching is as follows:

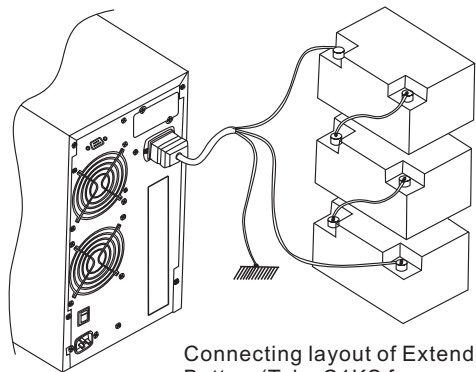
- 1) Take off the small cover of terminal strip.
- 2) Adopt AWG14or 2.1mm²
- 3) After matching the cable, please check if the connecting cable is firm.
- 4) Replace the small cover back where it lies.



4.Operating procedures of connecting external batteries to extended-time model

1. Use voltage of battery group/bank correctly according to different types of ups, C1KS:36VDC, C2KS:72VDC, C3KS:96VDC, otherwise malfunction might happen.

2. One end of the charging cable is to connect with UPS, the other with 3 open-type cables is to connect with battery group/bank. Red cable connects positive pole"+", black cable connects negative pole"-", yellow-green cable connects the ground.



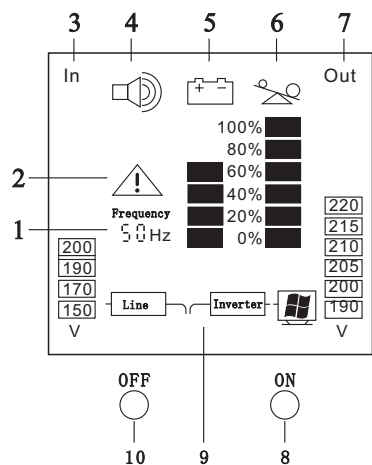
Yellow-green cable:
Connecting the ground
Red cable:
Connecting positive pole
Black cable:
Connecting negative pole

Connecting layout of Extended-time Battery(Take C1KS for example)

5.Panel Indication

1)Two designs of LCD display

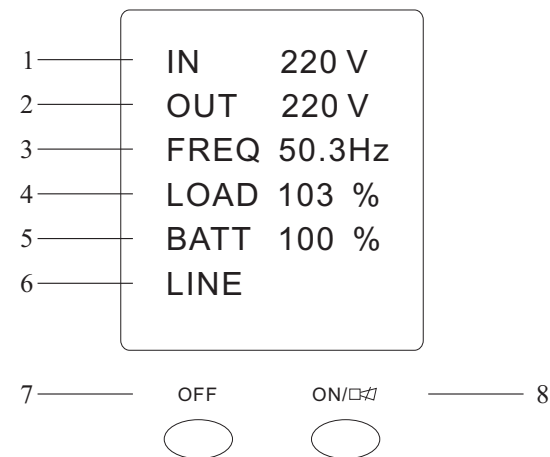
①.Design 1



● **Power switch:** Press continuously the key "ON" in the front panel and then ups will start up. Press continuously the key "OFF" in the front panel and then UPS will shut down.

- 1. Output Frequency
- 2. Alarm or Fault
- 3. Input Voltage
- 4. Sounding Alarm Allowed
- 5. Battery Capacity Percentage
- 6. Load Percentage
- 7. Output Voltage
- 8. Turn-on Voltage
- 9. Running Mode
- 10. Turn-off Key

②Design 2(8-shaped Tube)



- 1. Input voltage
- 2. Output voltage
- 3. Output frequency
- 4. Load percentage
- 5. Battery capacity percentage.
- 6. Running mode
- 7. Turn-off key
- 8. Turn-on key

2)LED Display

