

USER MANUAL For Central Battery Systems

CCU12-250 to CCU12-470 and CCU24-170 to CCU24-360 Series



Table of Contents

Part 1 : Overview Central Battery Systems	Page
1.1 Features	1
1.2 Technical Specifications	2
1.3 Status Indicators	3
1.4 Electrical Connector	4
 Part 2 : Installation and Operation	
2.1 Basic Installation and Operation Steps	5-6
2.2 Initial Device Function Testing	7
 Part 3 : Maintenance	
3.1 Device Maintenance	8
3.2 Initial Trouble Shooting	8
3.3 Important Note on Using the Unit	8
 Part 4 : Terms for Warranty and Service	
4.1 Terms for Warranty and Service	9

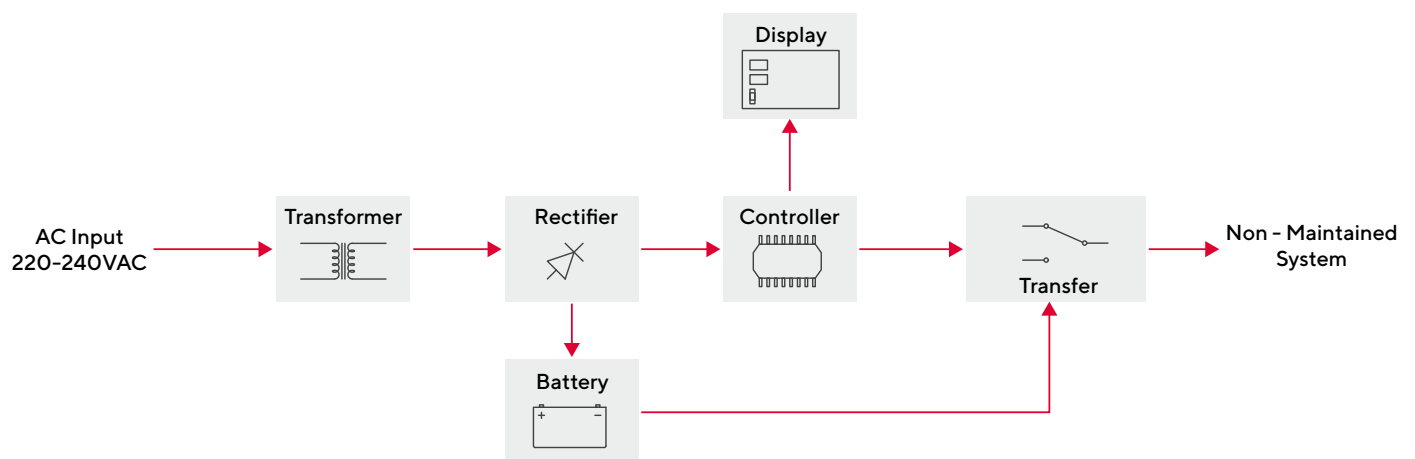
Part 1

Overview Central Battery Systems

1.1 Features

Central Battery Systems by CCU 12V and CCU 24V Series or the central control unit is used to detect any abnormalities of the main power distribution system. In case of error or emergency, the unit is designed to allow the emergency lighting system to bear large loads or larger loads than that the automatic emergency light (complete unit) can. The 12VDC and 24VDC unit is compatible with halogen lamp or MR16 LED lamp. The unit installation and usage are centrally controlled so that it supplies power to the lamp installed.

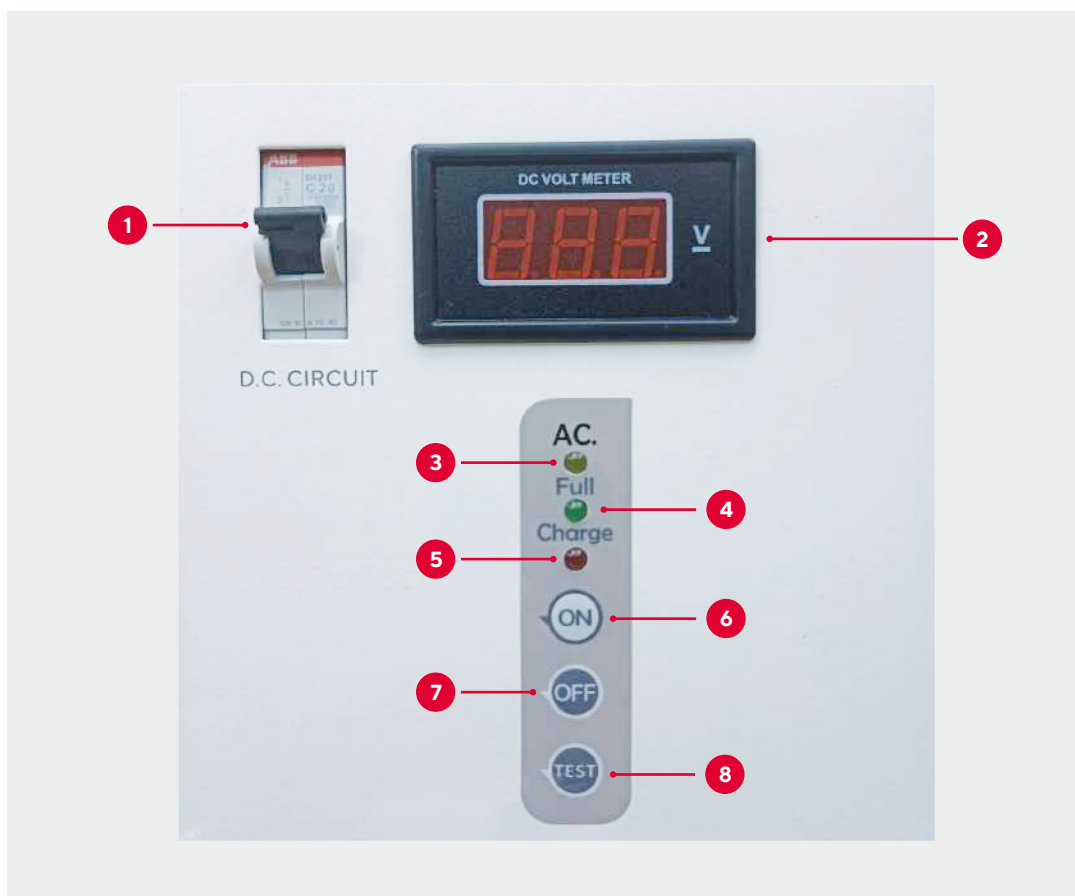
Principle of Operation – Central Battery Systems: 12V & 24V Series



1.2 Technical specifications

Model		CCU12-250	CCU12-300	CCU12-350	CCU12-470	CCU24-170	CCU24-240	CCU24-360
Rated Capacity (Wattage)		250	300	350	470	170	240	360
Mode of Operations		Non - Maintained						
Input	Voltage	220 -240VAC						
	Frequency	50Hz						
Output	Voltage	12V				24V		
Terminal Output		1 Output						
Maximum Load (Wattage)		250	300	350	470	170	240	360
Battery Type		Sealed Lead – Acid Battery						
Battery Rated Voltage		12V				12V x 2Pcs.		
Protections		- Overload & Short circuit - Battery Low voltage cut-off - AC Input Low Voltage Protections						
Operating Temperature		10°C to 50°C						
Weight (kg)		30.60	33.90	42.00	46.00	26.60	41.00	56.00

1.3 Status Indicators



No.	Symbol	Description
1	DC. CIRCUIT	Prevents short circuit and battery overload
2	DC. VOLTMETER	Indicating the battery voltage
3	LED AC.	Indicating input status
4	LED Full	Indicating fully charged status
5	LED Charge	Indicating charging status
6	Switch ON	To turn on the light (while the unit is not plugged in)
7	Switch OFF	To turn off the light (while the unit is not plugged in)
8	Switch TEST	To test the unit availability (during normal circumstance)

1.4 Electrical Connector



No.	Symbol	Description
1	AC INPUT 220V	For supplying AC220V power into the unit
2	OUTPUT 12V,24V	Terminal for connecting the load power output

Part 2

Installation and Operation

2.1 Basic Installation and Operation Steps

- 1.) Install the emergency lighting unit securely on the wall in the desired location for emergency lighting. Inspect the installation to ensure it is properly secured to prevent accidents such as falling.
- 2.) Open the front cover of the unit **1** to connect the load wire to the load terminal block inside the unit. (Ensure that the load wire is not short-circuited before connecting.)



- 3.) Switch the DC circuit breaker **1** to the 'ON' position. Observe the DC voltmeter reading and press the 'ON' **2** button on the device. The system will activate, and the connected light bulb will light up.

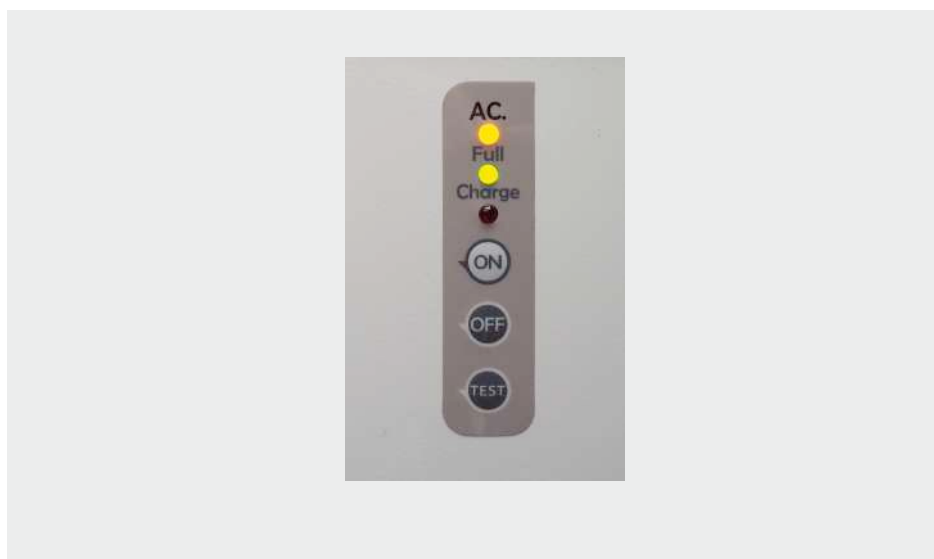


4.) Once AC220V is supplied to the unit, status indicators will display as follows:

4.1 LED AC. Power ON: Indicates AC voltage is present.

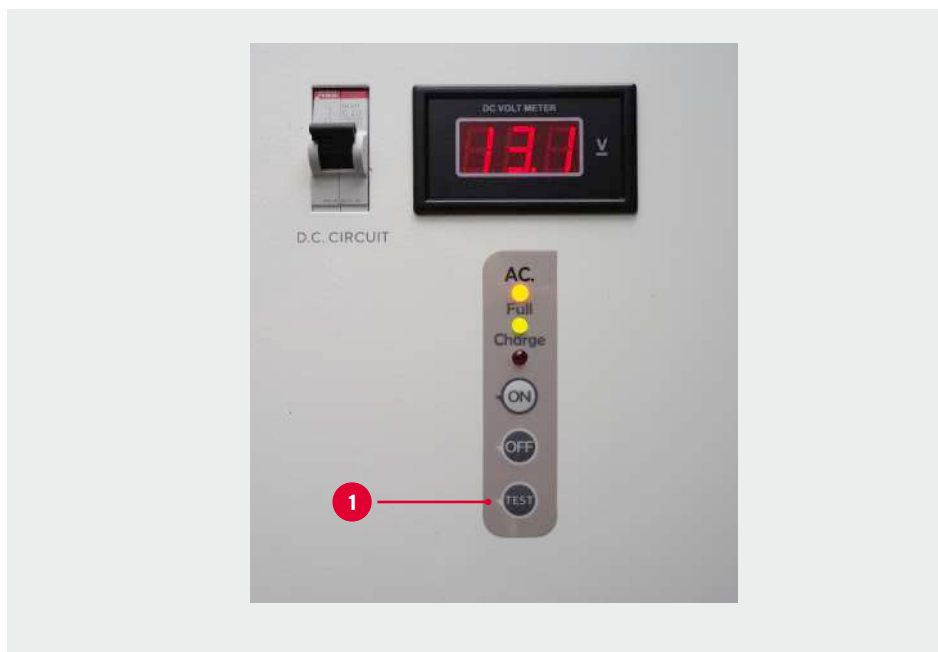
4.2 LED CHARGE ON: Indicates charging mode and battery is being charged.

4.3 LED Full OFF: Indicates battery is not yet fully charged.



2.2 Initial Device Function Testing

- 1.) Press the TEST switch on the device **1** – the emergency light will turn on.
Release the switch – the emergency light will turn off.



- 2.) Unplug the power cord from the AC220V 50Hz outlet – the emergency light will automatically turn on.
Reinsert the plug – the emergency light will automatically turn off.

Part 3

Maintenance

3.1 Device Maintenance

- 1.) Install the emergency lighting control unit indoors, protected from sunlight and rain.
- 2.) If the device is not used for a long time, store it in a dry room around 25°C.
Every 3 months, recharge the battery to maintain performance.
- 3.) Do not exceed the load capacity specified for the unit.
- 4.) Always inspect the load wiring before operation.

3.2 Initial Trouble Shooting

Cause	Problem	What to do
- Power not getting to the unit after plugging in. The LED AC light does not turn on.	- The power socket might not have any power. - The plug or socket is loose. - The AC.220V fuse is blown.	- Check the 220VAC power supply. - Check the plug and socket. - Contact customer service.
- Emergency light does not turn on after the power went out.	- The unit is not plugged in. - The battery terminals are not connected. - The lamp is faulty. - The load wiring is loose. - The DC fuse has blown.	- Check the unit's power socket. - Connect the battery terminals. - Contact our customer support department. - Check the load wiring. - Contact our customer support department.
- Emergency light only turns on for a short time after the power went out.	- The battery is not fully charged. - The battery has degraded.	- Charge the battery for at least 24 hours, then retest the operation. - Contact customer service to replace the battery.

3.3 Important Note on Using the Unit

- 1.) Always review the product specifications and instructions before each use.
- 2.) Install the unit in a well-ventilated area.
- 3.) Do not connect batteries with reversed polarity.
- 4.) Inspect the load wiring every time before installation and use.
- 5.) Do not connect wiring or loads that are not in good working condition.
- 6.) The system is intended for use only with emergency lighting.
Do not connect other equipment not approved by the manufacturer or designer.
- 7.) For battery storage: Keep the battery in a room at 25°C and recharge it once a month to maintain voltage and lifespan.

Part 4

Terms for Warranty and Service

4.1 Terms for Warranty and Service

1. The Warranty will only be covered if the customer fills in the “warranty registration form” and mail the return part back to the company within 7 days from the day of purchase. If this is not carried out the warranty will be considered void.
2. The warranty only covers the unit’s internal parts. The conditions and durations for the warranty of each part is as specified and the duration of the warranty is calculated from the date of purchase.
3. Please show your warranty card every time you contact our service center or the dealer you purchased the product from.
4. Products that fall into the following category are considered not covered by the warranty.
 - 4.1 The product was used in a way not specified in the manual.
 - 4.2 The product was used with accessories not meeting the required specifications specified in the manual.
 - 4.3 The product seems to have been damaged from being dropped or from strong impact, for example, the parts are loose, dented, scrapped or misshapen.
 - 4.4 The product has been repaired or modified by personnel not authorized by our company.
 - 4.5 The Warranty Void sticker is torn or removed.
 - 4.6 The product is damaged from careless use or incorrect maintenance, for example, the battery is swollen from overcharging, quick charging was used on the battery, the battery terminals have been short-circuited, the unit was used until the battery was completely discharged and not recharged immediately, the product was stored for long periods until the Battery Checker warning activates and still it is not plugged-in to charge or taking the battery to normal temperature conditions and not recharging it every 1 month.
 - 4.7 The product was stored in an unsuitable environment, for example, a location with moisture or water vapor.
 - 4.8 The product was supplied with a faulty AC power supply such as electrical overvoltage, electrical current surges, or lightning strikes entering the AC power line.
 - 4.9 Damages from natural causes such as fire, being summered in fluids, humidity, chemicals or force majeure.
 - 4.10 Damages from insects or animals.

Note : Please read the manual carefully before installation and operation to understand how to properly operate the unit.

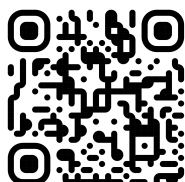
Contact us

ISON IMPORT-EXPORT CO., LTD.

Head Office 2915-2917 Ladprao Road,
Klongjan, Bangkapi, Bangkok 10240

phone 02 378 1034-5

fax 02 370 1672



www.sunnyemergencylight.com