

USER MANUAL For Central Battery Systems CCU12-50 to CCU12-180 Series



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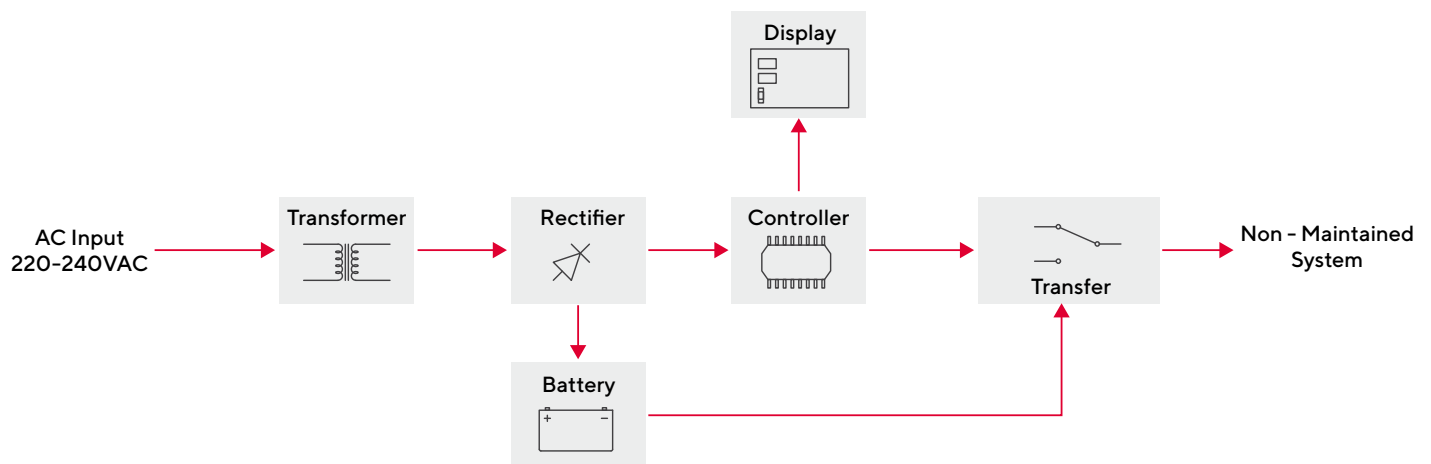
Part 1

Overview Central Battery Systems

1.1 Features

Central Battery Systems by CCU 12V 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 12 VDC 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.

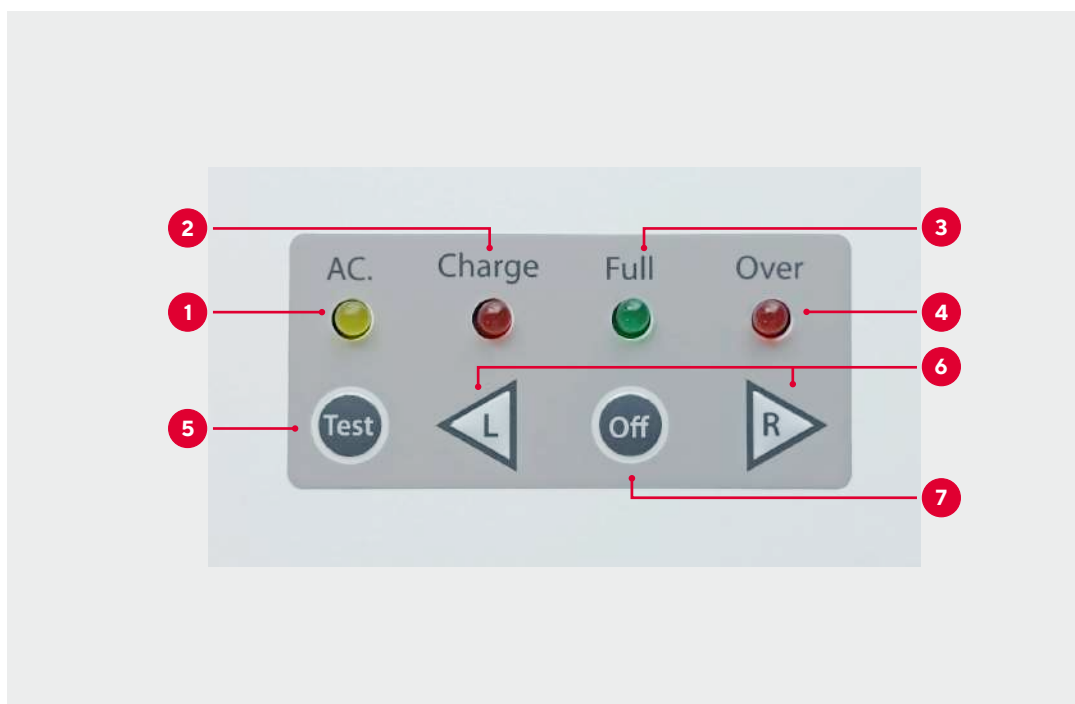
Principle of Operation – Central Battery Systems: 12V Series



1.2 Technical specifications

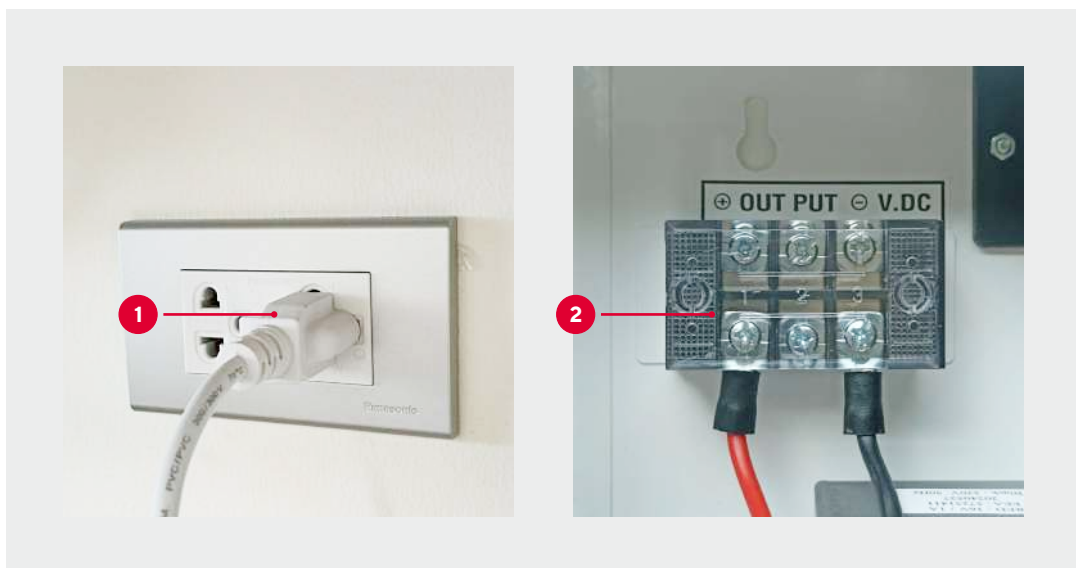
Model		CCU12-50	CCU12-60	CCU12-80	CCU12-120	CCU12-180
Rated Capacity (Wattage)		50	60	80	120	180
Mode of Operations		Non - Maintained				
Input	Voltage	220-240VAC				
	Frequency	50Hz				
Output	Voltage	12V				
Terminal Output		1 Output				
Maximum Load (Wattage)		50	60	80	120	180
Battery Type		Sealed Lead - Acid Battery				
Battery Rated Voltage		12V				
Protections		<ul style="list-style-type: none"> - Overload & Short circuit - Battery Low voltage cut-off - AC Input Low Voltage Protections 				
Operating Temperature		10°C to 50°C				
Weight (kg)		6.37	8.49	9.42	13.14	19.49

1.3 Status Indicators



No.	Symbol	Description
1	LED AC.	Indicating input status
		Indicates the status of the emergency lighting power backup unit (when the R/L switch is pressed while the device is unplugged).
2	LED Charge	Indicating charger status
3	LED Full	Indicating fully charged status
4	LED Over	Indicating battery charging malfunction
5	Switch Test	To test the unit availability (during normal circumstance)
6	Switch R/L	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)

1.4 Electrical Connector



No.	Symbol	Description
1	Plug AC220V	For supplying AC220V power into the unit
2	OUTPUT 220V	Terminal for connecting the load power output

Part 2

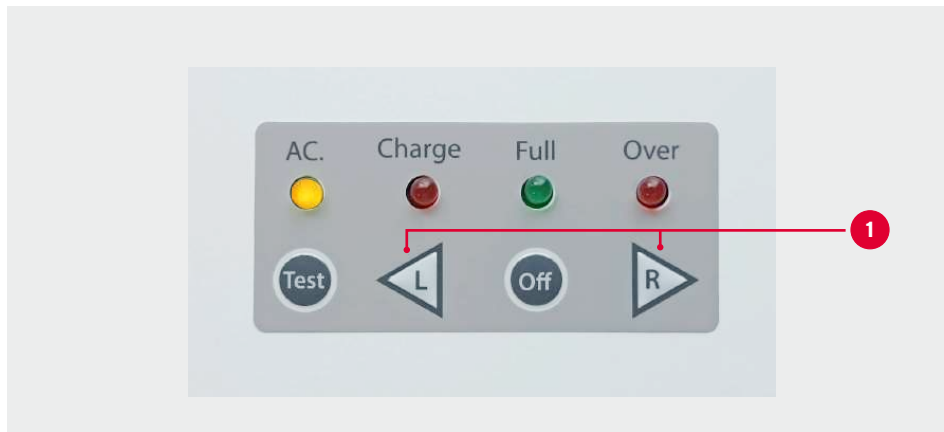
Installation and Operation

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 to connect the load wire to the load terminal block inside the unit. **1**
(Ensure that the load wire is not short-circuited before connecting.)



- 3.) Press the R or L switch **1** to activate the control unit. The device will supply electricity from the battery to the emergency light.



- 4.) Plug the power cord of the emergency light unit into an AC220V 50Hz outlet. **1**



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

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

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

5.3 LED Full ON: Indicates battery is 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 **1** – the emergency light will automatically turn off.



3.) When power goes out, the emergency light will automatically illuminate and then shut off once power returns, switching back to AC from battery automatically.

Note: In the event that the emergency light turns on automatically during a power outage and you wish to turn off the light to save energy, you may press the OFF switch or wait to press the R or L switch again when ready to turn the light back on.

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.

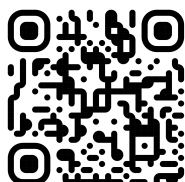
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