



INSTRUCTION MANUAL

GCC-D10A series

Dual-Battery Charge Controller

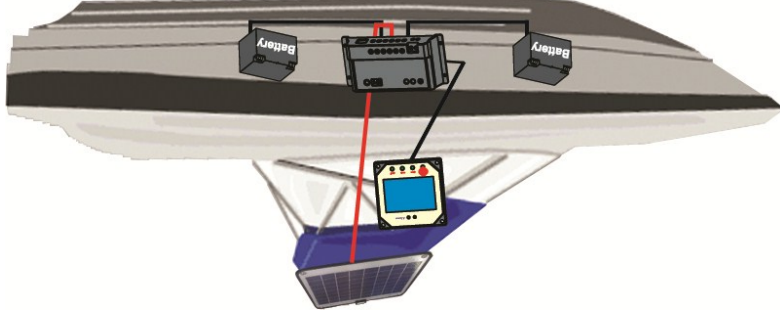
Ganz Eco-Energy's Dual Battery Charge Controller charges two independent battery banks using only one solar panel array. This unit is fully automatic and switches between batteries depending on their state of charge. For Boats, RVs, and other systems with two batteries. Can also be used with one battery.



RATINGS (12/24V auto work)

GCC-D10A, 10A, 12/24V auto-work

NOTES: For use with solar panels only



Setting 3: Selects Charging Frequency

Number shown	PWM Charging frequency
0	25Hz(pre-set)
1	50Hz
2	100Hz

This is important because the controller frequency may interfere with other electronics such as radios or radar.

1. LED blinking - short circuit, check the PV and battery, and make sure connections are correct.
2. LED slowly flashing - fully charged.
3. LED ON - charging
4. LED frequent flashing, with battery - not charging
5. LED OFF, no battery or over voltage.

LED Indications and Troubleshooting:

* For technical questions, please contact your Authorized Distributor.

* Warranty: 2 years - Contact your Authorized Distributor for complete terms and conditions.

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 CA: 20521 Earl St, Torrance, CA 90503 800 888-0131
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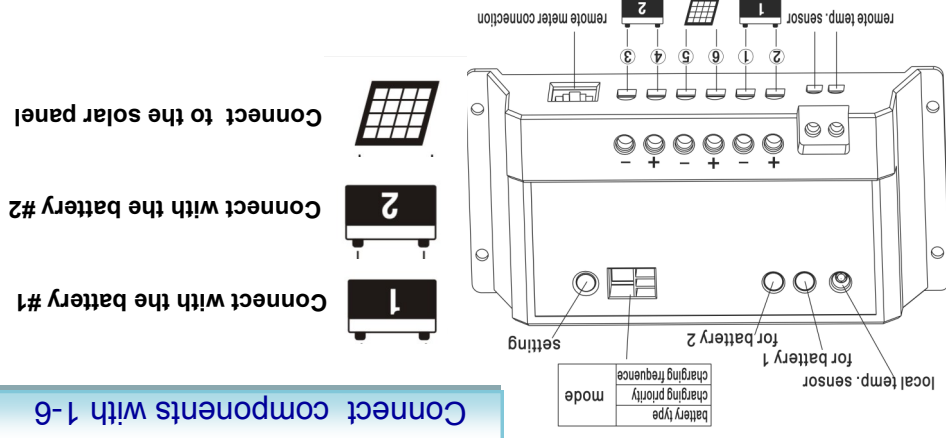
NOTE: Controller should not be exposed to water and should be installed in an enclosed area.

TECHNICAL INFORMATION

Setpoint	Sealed	Flooded	Gel
Equalize charging voltage	14.4V	14.6V	14.4V
Boost charging voltage	14.2V	14.4V	14.2V
Float charging voltage	13.7V	13.7V	13.7V
Maximum solar voltage	30V(or 55V)		
Battery voltage range	8-15V		
Boost time	30 minutes		
Self-consumption	4mA at night, 10mA at charging		
Meterbus connection	8-pin RJ-45		
Temp. compensation	-30mV/C/12V		
Terminals	4mm ²		
Temperature	-30F to +120F		

Note: Above data is for 12V. Please double the data if using 24V.

Connect components with 1-6



- ◆ **Remote Temp. Sensor: (RTS)**
A connection point for RTS (option) to remotely monitor battery temperature.
- ◆ **Local Temp. Sensor:**
Measures ambient temperature. Battery regulation is adjusted accordingly.

battery type	charging priority	mode
	charging frequency	

Provides charging & battery status and errors

- ◆ **Battery 1 and Battery 2** - Note: Battery #1 is typically the house and battery #2 is typically the starting battery for Boats and RV's.

- ◆ **Remote meter connection (Optional)**

A communication port for the remote meter.

Note: Where there is no RTS, the controller calculates the data which is received from the local temp. sensor. The controller changes to RTS automatically when the RTS is connected.

SETTING MODE: There are 3 user programmable functions. They are programmed by looking at flashing LEDs and pressing the "SET" button in different sequences. Hold the switch for 5 seconds until the number flashes. Once the number you choose is selected it will automatically be saved.

Setting 1: Selects the battery type

(preset)

Number Shown	Battery type
1	Sealed/Gel battery
2	Do not use
3	Flooded battery

Number	Battery #1	Battery #2
Show	charging	charging
0	0%	100%
1	10%	90%
2	20%	80%
3	30%	70%
4	40%	60%
5	50% (preset)	50%
6	60%	40%
7	70%	30%
8	80%	20%
9	90%	10%

Setting 2: Battery Priority Selection Function - Only set the % you want for battery #1. The controller will automatically calculate the % for battery #2.

Note: In the normal charging status, the controller will divide the charging current between 2 batteries by percentage. If battery #1 is completely charged, then the charge current will be diverted to battery #2 and return to the setting charging automatically when the battery #1 is in low voltage. When the controller detects there is only one battery, then all the current charge will automatically go to that battery.