



LIGHTEN
WORLD
INDUSTRY

世照股份有限公司

LIGHTEN WORLD INDUSTRY CO., LTD.

10696 台北市大安區忠孝東路四段303號7樓之1

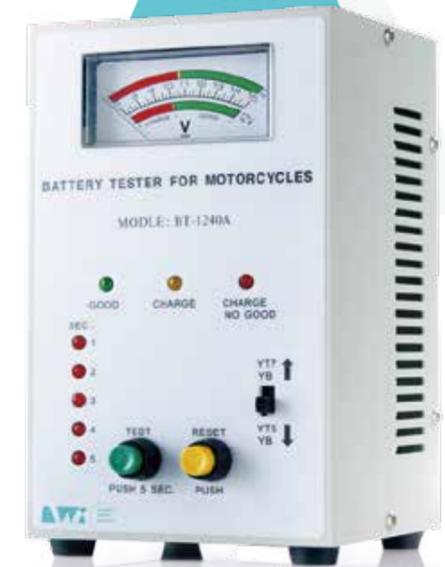
7F.-1, No.303, Sec.4, Jhongsiao E. Rd.,
Da-An District, Taipei City 10696, Taiwan

+886-2-2771-8682 +886-2-2751-7141

www.lightenworld.com.tw



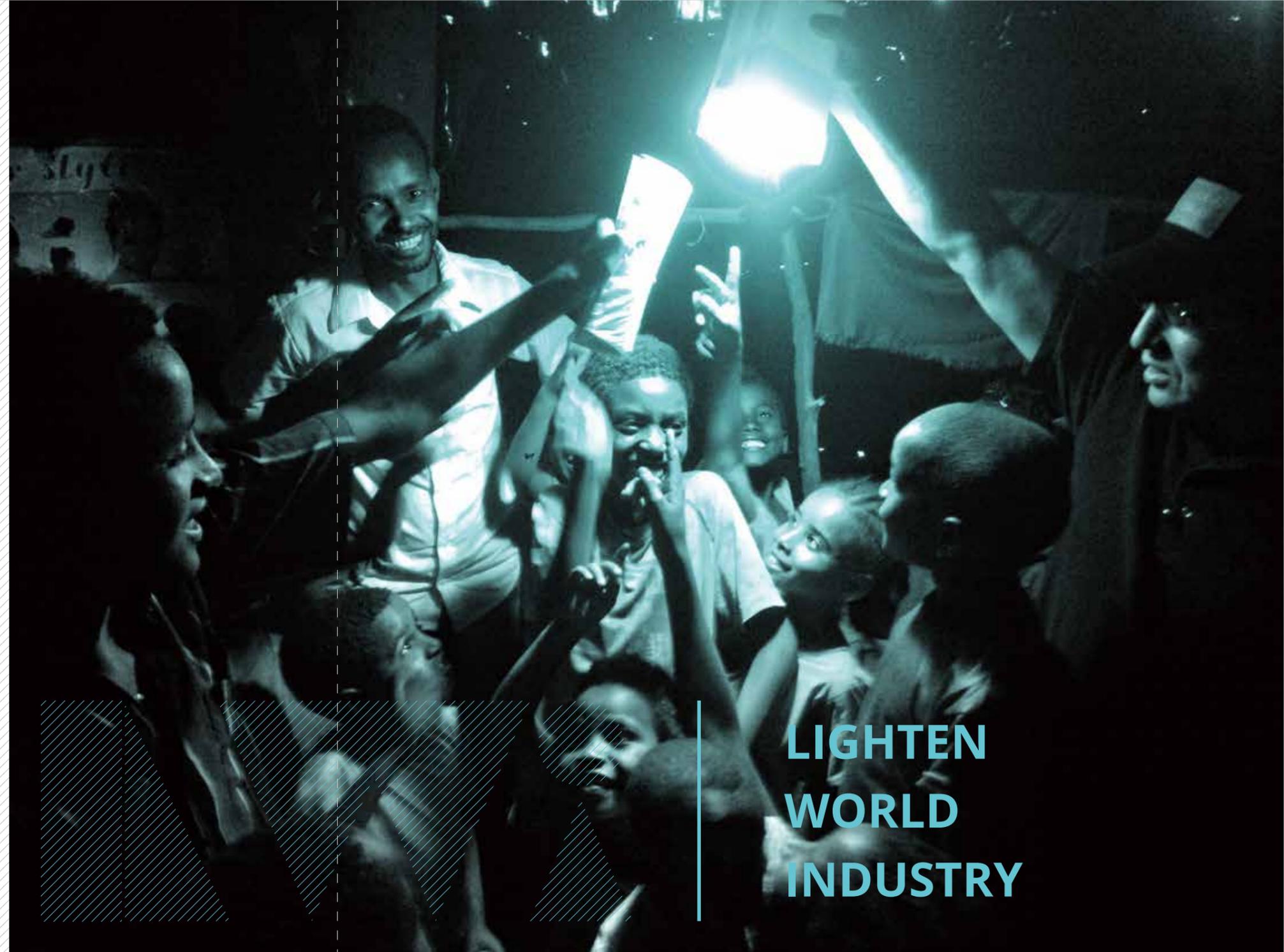
LIGHTEN
WORLD
INDUSTRY



**Your Energy
Solution
Anytime,
Anywhere.**

Contents

- 02 [About us](#)
 - Solar Battery
- 04 [Battery Charger](#)
 - Battery Charger (BCC-1208)
 - Battery Charger (BCC-1230)
 - Battery Charger (BCN-0602)
 - Battery Charger (BCN-1220)
 - Battery Charger (BCN-2430)
- 06 [Battery Tester](#)
 - Batter tester for Car (BT-12200A)
 - Batter tester for Motorcycle (BT-1240A)



**LIGHTEN
WORLD
INDUSTRY**

About us

Established in 1985, LIGHTEN WORLD INDUSTRY has been dedicated into design, manufacture, and export energy related products including AGM battery, gel battery, deep cycle battery, tubular battery, solar battery for energy storage solution with PV inverter, converter, power supply and battery charger. Our commitment in quality and after service wins satisfaction and trust from valuable customers worldwide.

With strong R&D team, we have involved in renewable energy sector since 2009 by manufacturing customized and self-sustainable solar home system, and also designing intelligent solar power

system for off-grid /on-grid / hybrid applications. Our solar solutions are now powering up household, office, and facility in Africa, Asia, Latin America and Oceania.

All of our solar solutions are carrying our AGM deep cycle or long life GEL deep cycle solar battery, which provide high performance in harsh environment. Our quality batteries fully satisfy various energy storage solutions from standby to cyclic applications including UPS, telecom, motive power, mobility scooter, solar home system and solar power system.

We provide your own energy solution for anytime, anywhere.

Battery Charger

BCC-1208

Operating instructions :			Protection:
Mode 1	Warming charge	Warming charge	Protection 1: Output short circuit protection Protection 2: Battery reverse connection protection Protection 3: Program control timer, Automatically detect battery voltage. (If keeping charge battery for a long time (for example:24hours), it is still very safe.)
Mode 2	Motorcycle	output constant voltage, output current MAX 1.5A	
Mode 3	Sedan	output constant voltage, output current MAX 3.5A	
Mode 4	Light farm machinery	output constant voltage, output current MAX 5A	
Mode 5	Vehicle	output constant voltage, output current MAX 5.5A	
Mode 6	Pulse charge	Pulse charge	

• This product is only applied for 12V battery, Constant voltage design, rechargeable for "sealed type / open type" battery

BCC-1230 (BCC-1208 Professional Edition)

Operating instructions :			Protection:
Mode 1	Warming charge	Warming charge	Protection 1: Output short circuit protection Protection 2: Battery reverse connection protection Protection 3: Program control timer, Automatically detect battery voltage. (If keeping charge battery for a long time (for example:24hours), it is still very safe.)
Mode 2	5A	output constant voltage, output current MAX 5A	
Mode 3	10A	output constant voltage, output current MAX 10A	
Mode 4	15A	output constant voltage, output current MAX 15A	
Mode 5	20A	output constant voltage, output current MAX 20A	
Mode 6	Pulse charge	Pulse charge	

• This product is only applied for 12V battery, Constant voltage design, rechargeable for "sealed type / open type" battery

BCC Series

Battery Charger (BCC-1208)

12V Battery Charger



Battery Charger (BCC-1230)

12V Battery Charger



BCN-0602

No timer

Operating instructions :			Protection:
Charging mode	Rechargeable 6V / 12V battery (manual switch)		Protection 1. External 3A fuse. Protection 2. Temperature control protection
6V	For 6V battery	output current MAX 2A	
12V	For 12V battery	output current MAX 2A	

• This product is only applied for charging 6V / 12V open type batteries

BCN-1220

No timer

Operating instructions :			Protection:
Normal charging mode			Protection 1. Normal charging mode, External 10A fuse. Protection 2. Boost charging mode, External 20A fuse. Protection 3. Temperature control protection
For 12V battery		output current MAX 10A	
Boost charging mode		output current MAX 20A	
For 12V battery		output current MAX 20A	

• This product is only applied for charging 12V open type batteries

BCN-2430

With timer (on the panel) "User can set the timer"

Operating instructions :			Protection:
Normal charging mode	Rechargeable 12V / 24V battery (manual switch)		Protection 1. Normal charging mode, External 20A fuse. Protection 2. Boost charging mode, External 30A fuse. Protection 3. Temperature control protection
12V	For 12V battery	output current MAX 20A	
24V	For 24V battery	output current MAX 20A	
Boost charging mode	Rechargeable 12V / 24V battery (manual switch)		
12V	For 12V battery	output current MAX 30A	
24V	For 24V battery	output current MAX 30A	

• This product is only applied for charging 12V / 24V open type batteries

BCN Series

Battery Charger (BCN-0602)

12V Battery Charger



Battery Charger (BCN-1220)

6V Battery Charger



Battery Charger (BCN-2430)

12V & 24V Battery Charger



Battery Tester

Batter tester for Motorcycle
(BT-1240A)

Batter tester for Car
(BT-12200A)



Batter tester for Car (BT-12200A)

(A) How to connect to Battery?

- 1 Connect **Red Clip** to Positive Terminal +
- 2 Connect **Black Clip** to Negative Terminal -

(B) How to test Battery?

- 1 Check Voltmeter to know what voltage battery is.
- 2 Set capacity for battery (For example: N50 battery, Black Control adjuster dial to 50AH).
- 3 Press red button in 5 seconds.
- 4 Then, indicator show the result and point to Green/Yellow/Red area.

* Test only one piece of 12V battery per time.

- Green** : Green area means battery full.
- Yellow** : Yellow area means battery out of capacity soon, please charge.
- Red** : Red area means battery under capacity, please charge.

Batter tester for Motorcycle (BT-1240A)

(A) Battery Tester(BT-1240A) How to connect to Battery:

- 1 **Red** Connect Red Clip to Positive Terminal ⊕ .
- 2 **Black** Connect Black Clip to Negative Terminal ⊖ .

(B) How to test battery : Applicable for 5Ah / 7Ah Motorcycle battery

- 1 Setting switch mode(YT7/YT5) based on battery capacity

Remark: YT7 = 7Ah 12V
YT5 = 5Ah 12V

- 2 Check Voltmeter to know what voltage battery is.
- 3 Press test button in 5 seconds.
- 4 Then, indicator show the result and point to Green/Yellow/Red area.
- 5 Test again, press reset button.

Instruction for application of BT-1240A battery tester

First confirm the model of the tested battery, switch the battery model to the model of the tested battery, clamp the output line terminal of this unit to the positive and negative ends of battery with red clip connect to "+" and black clip to "-" pole, check the pointer scale of this unit. If it is indicated at CHARGE(red) zone indicating recharge is required before using this unit for testing, if it is pointing at yellow zone indicating recharge may be required, and green zone indicate the battery is fine and may be tested by this unit. Then press down TEST button for more than 5 seconds, the SEC red indicator light will jump to 5 indicator light from 1, the interval of each indicator light is 1 second, after about 5 seconds, this unit will trip from the load of the tested battery, then you may release the TEST button and then check the three red, yellow and green indicator light at the bottom of the tester for the indication of the condition of the tested battery.

GOOD green light indicate good battery.
CHARGE yellow light indicate the battery is low, the usable time is comparably short.
CHARGE NO GOOD red light indicate the battery is exhaust which need immediate charge. Press RESET button while perform the test again to resume this unit for testing.

Attention:

The allowable ambient temperature for this unit is 40°C or below, please never test the battery two times continuously, otherwise the battery will be exhausted and overheat to the unit. If continue test is required, make test at 5 minutes interval or more.

