

INSTRUCTION DATA

PRODUCT: **BC12 CHARGER**

VER: **1.0**

DATE: **JANUARY 2007**



INSTRUCTIONS FOR BC12 CHARGER

Code No: BC12

Model No: BC12

Input: 12 volts DC

Output: 14.4 volts DC 1500mA

To suit 7Ah and 9Ah sealed lead acid battery

Approximate charging times for batteries at 10 volts are as follows:

- 9 amp/hr 8 hours

TO USE

- Insert input male cig plug into vehicle female cig plug fitting 12 volt DC.
- Insert output male cigarette lighter plug into female socket on LIGHTFORCE battery bag.
- When using BPS unit, ensure 3-way switch is in the full/on position.
- If not charging, check 10 amp input and output fuses in cigarette plug fittings.

Note: Red LED is "Power On Indicator Only"
Centre Terminal = Positive

WARNING

- Do not cover air vents during charging
- Use for any other purpose will void warranty

We do not recommend:

- Allowing you battery to discharge to less than 10 volts, or long term damage may be done to your SLA battery. At 10 volts your spotlight will dim to a dull yellow beam.
- Leaving charger turned on longer than necessary according to the above charging times.
- Charging any battery smaller than 7 amp/hour.

INSTRUCTION DATA

PRODUCT: **BCAUZ, BCVDE, BCBS**

VER: **1.0**

DATE: **JANUARY 2007**



INSTRUCTIONS FOR BCAUZ, BCVDE & BCBS CHARGERS

Code No: BCAUZ, BCVDE, BCBS

Model No: MW12A10

Input: 220/240 volts AC 50Hz

Output: 12 volts DC 1000mA

To suit 7Ah and 9Ah sealed lead acid battery

Approximate charging times for batteries at 10 volts are as follows:

- 9 amp/hr 10 hours

TO USE

1. Plug charger output (male cig plug fitting) into battery connection on battery carry bag.
2. Plug charger input into 220/240 volt power supply and switch on. The LED will glow red.
3. Charging time will vary for each battery, depending on size, condition and state of charge.

Note: Charger will supply high amperage to a flat battery and will taper automatically to low amperage as charge increases.

WARNING

- Do not cover air vents during charging
- Use for any other purpose will void warranty

We do not recommend:

- Allowing your battery to discharge to less than 10 volts. Long term damage may result and at 10 volts your spotlight will dim to a dull yellow beam.
- Leaving your charger turned on longer than necessary (refer to charging times above).
- Charging any battery smaller than 7 amp/hour.

INSTRUCTION DATA

PRODUCT: **PORTABLE POWERPACK**
VER: **1.0**
DATE: **NOVEMBER 2006**



PORTABLE POWERPACK USER INFORMATION - BPS / BP8 / BP8BPS

Note: BP8BPS is a combination of BPS & BP8 so the same instructions apply.

BPS – BATTERY POWER SAVER

The BPS power saver is a system that allows operation of a light in two modes governed by the three position rocker switch

1. FULL/ON – is used when full power is required and by-passes the dimmer. This position must be used when charging.
2. OFF/STORAGE – switches off all power to the battery and should be used for storage.
3. DIMMER – is the power saving position. The dimmer knob regulates the output from the battery. By rotating the dimmer knob the ratio of the power supply is altered, effectively dimming or brightening the light.

Note:

- Never store the unit with the switch in the dimmer position as damage to the battery will occur.
- The BPS unit may be fitted to a battery bag (BP8BPS) or used independently.

SPECIFICATIONS

DIMENSIONS **BPS:** 45mm (H) x 60mm (W) x 105 mm (L)

BP8 - PORTABLE POWER PACK

The BP8 Portable Power Pack comprises an 9 amp/hour NIL maintenance SLA (sealed lead acid) battery, carry bag, 15 amp blade fuse and female cigarette socket for spotlight operation.

The SLA battery requires no fluid adjustments and will not leak if carried in other than an up-right position. For optimal long term performance the battery should be charged, operated and stored in the **UP-RIGHT POSITION**. Careful consideration must be given to the re-charging of the nil maintenance battery. It is recommended for maximum life expectancy the charging voltage and current be regulated.

VALUES: Voltage between 13.5-14.7 volts
Amperage maximum 1.5amp/hour

IMPORTANT!

Connect the red "FUSED" wire to the positive (+) battery terminal

CHARGING THE BATTERY

Lightforce can supply two charging systems to maximise battery use and life.

1. To fully recharge the battery a maximum of 1.5amp/hour trickle charger via the mains power supply is used and plugged directly into the female cigarette socket. 10 hours charging of the battery is usually sufficient. Use of a fast charge higher amperage unit may cause irreparable damage to the battery and is **not** recommended. Lightforce Australia Pty Ltd has available chargers to suit your mains power supply. Ask for the correct code when ordering:

- **BCAUZ - Australian style pins**



- **BCBS - British style pins**



- **BCVDE - European style pins**



2. **BC12** is a 14.7 volt 1.5 amp output step-up charger that can be used to fully recharge your flat 12v battery from any other 12 volt DC power source of more than 2 amps output.

In order to maintain the battery in optimal operation condition it is recommended that initial charging should take place as soon as possible after purchase for 10 hours. Re-charging should take place prior to complete discharge of the battery, preferably before the battery reaches approximately 10 volts. At this voltage the brightness of the normally white light emitted from the spotlight "dulls" to a yellow beam. Please note that if these instructions are not followed the life of your battery will be drastically reduced.

IMPORTANT: The battery must be recharged as soon as possible every time after use and before storage of the battery.



The cycle times for discharged batteries will also effect the service life of the battery, as indications please note the following table:

% DISCHARGE	EXPECTED CYCLES
100	200 times
50	500 times
30	1200 times

BATTERIES - MAIN FEATURES

1. True maintenance free operation
2. Able to be used in any position
3. Five to six year shelf life if periodical charging is performed.
4. Up to 1200 charge/discharge cycles
5. Low self discharge for long storage life
6. No leakage from case or terminals
7. Broad operating temperature range, between -20 degrees C and +60 degrees C

BATTERY DISCHARGE TIME

The following times are based on the use of a fully charged 9 amp/hour 12 volt SLA battery. Temperature effects all batteries. Temperature in this test was kept at 20 degrees C (68 degrees F). The discharging of the 12 volt batteries will slowly effect the candela or brightness of all lights, i.e. as the battery decreases its voltage the candela begins to decrease also. At approximately 10 volts the test was stopped. At this point the candela is markedly affected and batteries are deemed to need recharging.

BULBS	APPROX TIME TO REACH 10 VOLTS (continous use)
100W (8.33amps)	40 minutes
75W (6.25 amps)	1 hour
50W (4.16 amps)	1 hours 30 minutes
30W (2.5 amps)	2s hour 40 minutes

NOTES FOR MAXIMUM PERFORMANCE

1. For extended shelf storage top up the charge of the 9 amp/hour battery every three to four months for 2 hours.
2. When coupled with any of the light weight Lightforce range of spotlights use of a 12v 30w (GL14) bulb will obtain maximum endurance relative to performance.
3. **DO NOT USE** the power pack as a light source in conjunction with it being charged from the vehicle cigarette lighter plug, as excessive current is drawn through the charging cable.

SPECIFICATIONS

WEIGHT **BP8:** 3 kg approx

BP8BPS: 3.1 kg approx

DIMENSIONS **BP8:** 110mm (H) x 85mm (W) x 175mm (L)

BP8BPS: 140mm (H) x 85mm (W) x 175 mm (L)

FUSE 15 amp Blade.

INSTRUCTION DATA

PRODUCT: **CHARGING INFORMATION**

VER: **1.0**

DATE: **JULY 2007**



CHARGING INFORMATION

- We recommend you remove the battery pack from your Enforcer prior to charging.

Connecting your battery to charger:

- a. Connect the output lead of your charger into the battery pack
- b. Plug the output plug of your cig or 240VAC plug pack power supply into the input socket on your battery charger.
- c. Using either your cig plug for 12-24VDC connection or mains plug (240VAC), power up your charger unit.

- The red CHARGING indicator light will illuminate when the battery is on charge
- The green READY indicator light will flash when your battery is fully charged

Leaving your charger on for extended periods of time (24hrs plus) can cause damage and void warranty.

Approximate charging time for a flat battery is 10hrs.

WARNING: After disconnecting your Enforcer battery from the charger, let it sit for approx 5 minutes or run the LED's for a minute or so before using the main bulb as a fully charged battery straight from the charger will have a high voltage, this can be more than the bulb can handle.