

Alpha Power Battery Charger



Model: BC700N
DC: 012617

LEARN YOUR CHARGER



IMPORTANT:

The charger is restricted to charging NiCd and NiMH rechargeable batteries only.

POWER UP

1. Plug the 12V 0.75A AC/DC cord into an outlet, and then into the battery charger.
2. Insert the battery/batteries to be charged. Within 8 seconds, "Charge" (default mode) and the battery voltage will show.
3. Allow charger to sit for several hours to charge the batteries.

CHANGE OPERATION MODE | CHARGING CURRENT

1. Hold the MODE button until the display changes. Then press and release the MODE button to change modes. (Charge, Discharge, Refresh or Test can be selected).
2. Press the CURRENT button within 8 seconds of the last action to select the charging current. (200, 500 or 700 mA).
3. After eight seconds, the display will blink once and the batteries will start selected action. The charging current can no longer be changed. You can reset the current by taking out all of the batteries and repeating the steps above.
4. Press the DISPLAY button to view various display modes.

Note: Although the individual charging bays can be operated in different modes, the charging current of the second, third and fourth charge bays cannot be set higher than charging bay 1.

OPERATING MODES

Regardless of operation mode, the batteries will end up fully charged and ready to use. You can select a different charging mode for each charging bay if you choose.

Charge: Charges the rechargeable battery (charger automatically switches to trickle charge after battery is full).

Discharge: Discharges the battery then charges it one time.

Refresh: Batteries will be discharged and recharged until the charger cannot remove additional charge from the battery. This may cycle up to 20 times. The battery will receive a final full charge when it has reached its capacity.

Note: Refresh may bring an old rechargeable battery back to its optimum condition.

Test: Batteries are charged to full, then discharged to measure capacity, then recharged to full again. Battery Capacity is measured in Amp hours or Milliamp hours (Ah or mAh).

Note: During Discharge, Refresh and Test modes, the Discharge current will be half of charging current selected.

TRICKLE CHARGE

- Once the battery is fully charged from any of the operating modes, the charger will give a small amount of current to the batteries to maintain the fully charged level.
- Trickle charge is automatically launched after batteries are fully charged and kept in the charging unit.
- The signal "Full" will be displayed on the LCD.

DETERMINE YOUR CURRENT BATTERY VOLTAGE

1. Insert the battery into the charger.
2. Press and release the DISPLAY button until V (voltage) and a number show in the display.
3. The number will be the current voltage of the battery.

Note: This is not the capacity of the battery only the current voltage. To check capacity use the Test mode.

DETERMINE YOUR BATTERY CAPACITY

Battery capacity is determined by counting the amount of power **removed** from a fully charged battery.

During the Test mode the rechargeable batteries will be:

- Charged fully
- Discharged to determine the battery capacity
- Charged fully again for use.

TEST MODE: Insert the battery for "Test" into the charge bay.

Within 8 seconds:

1. Press the BAY button. The corresponding display will flash.
2. Press the MODE button to select the "Test" mode.
3. Press the CURRENT button to select the charging current in the test mode: 200, 500 or 700 mA.
4. After 8 seconds, the display will blink once to confirm and end changes.
5. The discharge capacity in (mAh) or (Ah) will be estimated and shown after the discharging ends.

CHARGING TIME

Charging Time with various charging current			
Size of battery	Battery Capacity	Charging current selected (mA)	Estimated charging time
AA	2600 mAh	700 ~	3 hr 35 min
		500	~5 hr
		200	~13 hr
AAA	1000 mAh	700 ~	60 min
		500	~100 min
		200	~5 hr

DISPLAY READINGS

Milliamp (mA): The charging current or speed of charge.

Milliamp hours (mAh): The capacity of the battery or the amount of charge added to a battery. Example: If a 2600mAh capacity battery is already half full when you charge it you will not add 2600mAh of capacity to the battery.

Amp hours (Ah): The capacity of the battery or the amount of charge added to a battery. When the mAh (Milliampere hour) reaches 2000 the display switches to Ah (Ampere hour) by moving the decimal point. One mAh is 1/1000 of an Ah.

Time elapsed (h): Length of charging time.

When the battery is overheated the charging ceases automatically. "000 mA" will be displayed.

Voltage (V): Battery voltage.

- NULL:** Will show when;
- No battery is in the charging bay.
 - The battery is below .9 volts and the charger thinks the battery is damaged so will not charge it.

FULL: Will show when the battery has completed its charging cycle. The FULL display may alternate with a trickle charge display.

NEW BATTERIES NOT AT FULL CAPACITY

- Rechargeable batteries improve capacity over time.
- Charge batteries before their first use or after a long storage.
- Then, use the batteries in a device (under load), charge them, use them, charge them, 5-10 times before “refreshing” the batteries.

CHARGER DISPLAYS IN CHARGING MODE

Various displays in Charge Mode				
Stage in Charge mode	Various displays (toggled by pressing DISPLAY key)			
	Voltage (V)	Current (mA)	*Time (hh:mm)	Capacity (mAh/ Ah)
During charging	Instantaneous Battery voltage	Charging current	Charging time elapsed	Accumulated capacity
Full stage		Trickle charging current		

Various displays in Discharge Mode				
Stage in Discharge mode	Various displays (toggled by pressing DISPLAY key)			
	Voltage (V)	Current (mA)	*Time (hh:mm)	Capacity (mAh/ Ah)
During discharging	Instantaneous Battery voltage	Discharging current	Discharging time elapsed	Capacity during discharging
During charging		Charging current		
Full stage		Trickle charging current	Charging time elapsed	Accumulated capacity

Various displays in Refresh Mode				
Stage in Refresh mode	Various displays (toggled by pressing DISPLAY key)			
	Voltage (V)	Current (mA)	*Time (hh:mm)	Capacity (mAh/ Ah)
During discharging processes	Instantaneous Battery voltage	Discharging current	Discharging time elapsed	Capacity during discharging
During charging processes	Instantaneous Battery voltage	Charging current	Charging time elapsed	Capacity determined in last time discharging
Full stage	Instantaneous Battery voltage	Trickle charging current	Elapsed time of last discharging	Maximum battery capacity determined in discharging

Various displays in Test Mode				
Stage in Test mode	Various displays (toggled by pressing DISPLAY key)			
	Voltage (V)	Current (mA)	*Time (hh:mm)	Capacity (mAh/ Ah)
During charging	Instantaneous Battery voltage	Charging current	Charging time elapsed	"--- mAh"
During discharging		Discharging current	Discharging time elapsed	"--- mAh"
During 2nd charging		Charging current	2nd charging time elapsed	Capacity of the battery determined in discharging
Full stage		Trickle charging current	Discharging time elapsed	Capacity of the battery determined in discharging

WE'RE HERE TO HELP!

FIND FULL MANUAL AND FAQs UNDER THE **SUPPORT TAB** AT: <http://bit.ly/BC700n>

JOIN THE CONVERSATION

Ask questions, watch detailed setup videos, and provide feedback on our social media outlets!



NEED MORE HELP?

If you require additional support, call our friendly customer support representatives based out of our office in La Crosse, Wisconsin.

Phone: 1.608.782.1610

Our knowledgeable customer support team is available Monday-Friday, 8am-6pm CST.

WARRANTY INFO

La Crosse Technology, Ltd. provides a **1-year limited time warranty** (from date of purchase) on this product relating to manufacturing defects in materials & workmanship.

For Full Warranty Details, Visit:
www.lacrossetechnology.com/support

SPECIFICATIONS

Input voltage for AC/DC adapter: 100-240 VAC

Output voltage for AC/DC adapter (AC6): 12V 0.75A

AC Cord Model: HX13-1200750-AU-001

Charging current range: 200 mA - 700 mA

Max charging capacity (capacity of rechargeable batteries): 3000 mAh

Dimensions (L x H x W) of Charging unit: 2.95" x 5.11" x 1.57"
(75 x 130 x 40 mm)

CAUTIONS

1. The charger is restricted to charging NiCd and NiMH rechargeable batteries only. Never adapt this charger to other types of batteries such as alkaline, lithium, carbon zinc or other types that are not specified.
2. The charging unit should be used only at normal room conditions.
3. Always follow the charging instructions for the rechargeable battery. Observe the recommended charging current of the rechargeable batteries.
4. Never use any power cable and transformer other than one originally supplied with the charging unit.
5. The rechargeable batteries may become hot during charging (especially when high charging current is chosen). Take extra care when taking out the batteries after charging.
6. Unplug the charging unit from the power source when not in use.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Increase separation between equipment & receiver.
- Consult the dealer or an experienced radio/TV technician for help.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Caution!
The manufacturer is not responsible for any radio or TV interference caused by unauthorized changes or modifications to this equipment. Such changes or modifications could void the user authority to operate the equipment.
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