

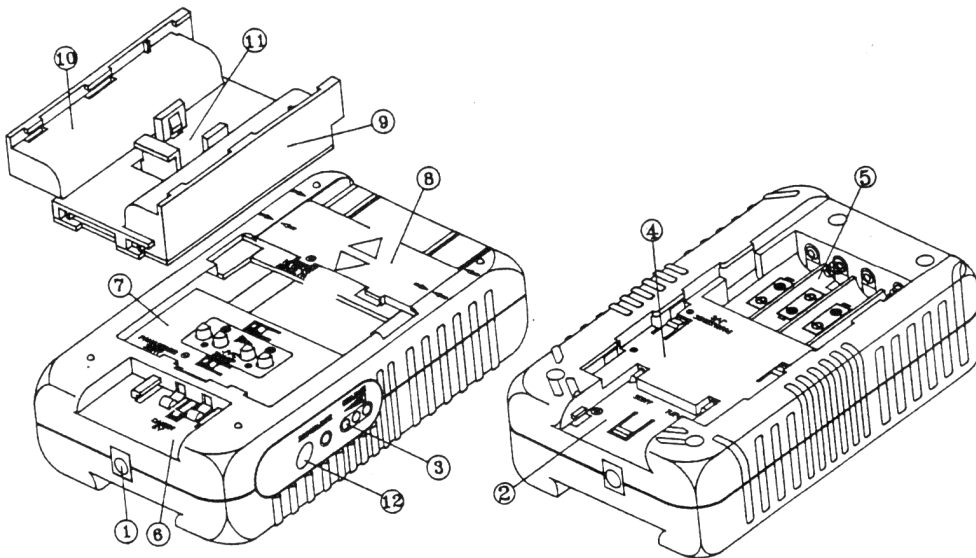


MAHA ENERGY CORP.

# MH-C2000

## QUICK CHARGER FOR CAMCORDERS AND DIGITAL CAMERAS

Thank you for your purchase of Maha's MH-C2000 Camcorder/Acell charger. This charger is designed to charge nearly all the popular types of camcorder battery packs. Even for Digital camera users there is a "AA" cell charger built in. This charger can be used from a 12v source or from a 110v wall plug. Both 12v and 110v adapters are included in this package.



1. DC Jack
2. Sony 7.2v Position
3. LED Charging Indicators
4. Panasonic & JVC 9.6v Position
5. UM-3 & UM-4 Position
6. Canon 6v Position
7. Panasonic & Sony 6v Position
8. Adjustable Sliding Plate
9. Adapter for BP-22, LCS-3212A
10. BP-22 Charging Position
11. LCS-2312A Charging Position
12. Discharge conditioning button

1. Connect the unit using either power cord supplied (12v auto adapter or the 110v wall plug)
2. Attach your battery pack to the proper position on the charger.
  - **Sony 7.2v Camcorder pack**, use charging position (2) place battery on the charger and slide into a locked position charging indicators will illuminate and a short tone should be heard when contact is made.
  - **Panasonic & JVC 9.6v Camcorder packs**, use charging position (4) place battery on the charger and slide into a locked position charging indicators will illuminate and a short tone should be heard when contact is made.
  - **AA size battery cells or UM-4, UM-3 battery packs**, use charging position (5) make sure polarity is correct. Charging indicators will illuminate and a short tone should be heard when contact is made.
  - **Canon 6v Camcorder packs**, use charging position (6) place battery on the charger and slide into a locked position charging indicators will illuminate and a short tone should be heard when contact is made.
  - **Sharp & JVC 6v Camcorder packs**, use charging position (7) place battery on the charger and slide into a locked position charging indicators will illuminate and a short tone should be heard when contact is made. NOTE: slide plate (8) may need adjustment to fit battery pack.
  - **Panasonic & Sony 6v Camcorder packs**, use charging position (7) place battery on the charger and slide into a locked position charging indicators will illuminate and a short tone should be heard when contact is made. NOTE: slide plate (8) may need adjustment to fit battery pack.
  - **Panasonic 4.8v camcorder pack**, use charging position (7) place battery on the charger and slide into a locked position charging indicators will illuminate and a short tone should be heard when contact is made. NOTE: slide plate (8) may need adjustment to fit battery pack.

3. **Auto voltage detection and charging mode:** When a battery pack is properly aligned to the charger. The charger will start its auto detection process. As soon as contact is made note the flashing red light on the front display, the light will flash anywhere from 1 to 5 times indicating the voltage of the battery pack. 1 flash indicates the charger is detecting a 3.6v pack, 2 flashes indicates detection of a 4.8v pack, 3 flashes indicates detection of a 6v pack, 4 flashes indicates detection of a 7.2v pack, and if the charger flashes 5 times it is detecting a 9.6v pack. **NOTE:** if the battery pack is over discharged it may detect the voltage level below the pack's voltage causing all three lights to be lit in the first few minutes of charging. If this is the case pull the battery pack off the charger after the first few minutes of charging and re-align the battery to the charging contacts making note that the charger detects the correct voltage or not.
4. After the battery pack has been properly aligned to the appropriate charging contacts and the charger completes the auto detection mode a yellow light and short audible tone will sound, this indicates that the charging mode has started.
5. When a charging battery pack reaches approximately 1/3 of its charge the display will indicate two lights, the first yellow light and a red light
6. As the battery pack reaches 2/3 of its charge all three charging indicator lights come on, one yellow, and two red lights.
7. When the battery pack reaches its fully charged state either all the lights will go out or the last red light will remain lit. The battery pack is ready to be removed at this point.
8. If when the charger is done rapid charging and a single red light is lit this indicates the charger is done rapid charging and is now charging at a 40mAh-maintenance charge. It is not recommended to leave a battery on the charger in this mode for long extended periods of time. If when done charging all lights are out the charger is done rapid charging and can be removed at any time.
9. **Discharge Feature:** This mode should only be used if there is a remaining charge on a battery pack and you want to "top off" a battery. Newer type cells such as Ni-MH and Li-ion DO NOT need to be discharged before charging. In the case of NiCD type cells, by first discharging to 1v/cell can prevent "Memory effect" or loss of capacity. When NiCD or NiMH cells are new or have not been used for long periods of time they get "resistant" to taking a charge and need to be cycled through about 3 charge/discharge cycles. In most cases charging and discharging will rejuvenate battery packs to full capacity.
10. To change from charge to discharge mode follow the instructions for attaching the battery pack to the charger. Wait till the auto voltage detection has finished (yellow light is on and charger sounds a short tone). Push the blue striped button on the control panel. The yellow and /or red lights will turn off and the green light will turn on indicating the charger is discharging the battery. **NOTE:** The discharge mode may only last a short time to as long as many hours depending on the amount of charge and storage capacity of the battery pack.
11. After the charger discharges the battery pack to 1 volt per cell it will automatically sound a beep and switch back to the charge mode. **NOTE:** if the charger is put into the discharge mode accidentally you can remove the battery pack from the charger and start over.

## SPECIFICATIONS:

Input Voltage:	DC 12v – 18v AC to DC transformer 18v 800mAh
Charging current:	760mAh (camera battery packs), 380mAh (AA & Sony NP-500H)
Discharge current:	400mAh (camera battery packs), 200mAh (AA & Sony NP-500H)
Max discharge voltage:	3.6v pack = 3v, 4.8v pack = 4v, 6v pack = 5v, 7.2v pack = 6v, 9.6v pack = 8v
Over charge protection:	-ΔV (-50mV)
Voltage detection Range:	DC 3.6v, 4.8v, 6v, 7.2v, 9.6v
Dimensions:	160mm x 92mm x 64mm
Unit Weight:	245g