



Fuses

This charger is protected by a 2 amp glass fuse. If you need to replace a fuse, your local hobby retailer should be able to supply one. You can also find replacement fuses at automotive stores. Always replace your fuse with a new fuse of the same rating.

Safety Precautions

- Do not leave your battery and charger unattended during use.
- Always allow charger to cool between charges.
- Never connect the charger to an automobile 12V battery while the vehicle is running.
- Faceplate can become hot during charging. Keep the charger away from any material that may be affected by heat.
- Carefully observe connector polarities at all times.
- Do not let children charge battery packs without adult supervision.
- If either charger or battery becomes hot to the touch during the charge process, end the charge process immediately.

Warranty and Repair Policy

This charger is guaranteed against workmanship and manufacturing defects for a period of 5 years from the original date of purchase. This warranty is limited to the original purchaser and is not transferable. Warranty repair will not cover units that have been modified, misused or serviced by an unauthorized service center.

To speak to a service technician, call 1-877-504-0233.

If your charger needs to be repaired, ship the charger in its original box (freight prepaid) to:
Horizon Service Center
Attn: Dynamite Service
4105 Fieldstone Rd.
Champaign, IL 61822

Include your complete name and address information inside the carton and clearly write it on the outer label/return address area. Include a brief summary of the difficulty. Date your correspondence and be sure that your name and address appear on this enclosure. Also, please include a phone number where you can be reached during the business day.

Warranty Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Providing warranty conditions have been met, your charger will be repaired free of charge.

Non-Warranty Repairs

Should your repair cost exceed 50% of the retail purchase cost, you will be provided with an estimate advising you of your options. Any return freight for non-warranty repairs will be billed to the consumer. For non-warranty repairs, please advise us of the credit card you prefer to use. Horizon Service Center accepts Visa and MasterCard. Please include your card number and expiration date. Horizon Service Center also accepts money orders.



VISION PEAK™ ULTRA AC/DC Peak Charger

For 1-8 Cell Ni-Cd, Ni-MH and 1-3 Cell Lithium Polymer (Li-Po) Battery Packs



- Vision LCD icon shows charge status
- Multi-function LCD shows charge time, charge current and voltage
- Charges virtually all 1- to 8-cell Ni-MH & Ni-Cd packs and 1- to 3-cell Li-Po packs
- Adjustable charge rates from 0.1A-5A
- Input and output circuit protection
- Automatic trickle charge
- Limited 5-year warranty



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www.horizonhobby.com
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Introduction

Thank you for purchasing the Dynamite® Vision Peak™ Ultra AC/DC Peak Detection Charger. As the most technologically advanced charger in the Vision line, this charger has all the same great features the Vision chargers are famous for but also now charges 1- to 3-cell Lithium Polymer (Li-Po) batteries. Now you can monitor the fast charging process through the charge indicator on the LCD display as well as charge time, current voltage and peak voltage. Also charge 1- to 8-cell Ni-Cd and Ni-MH packs with an automatic cell selector.

Features



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|--|---|
| 1. 110V AC or 12V DC input | 7. Receiver Pack charge lead adapter |
| 2. Adjustable .1 to 5 amps fast charge rate (.1 to 2.5 amps for Li-Po) | 8. 2 amp fuse |
| 3. LCD charge level/charging information display | 9. Cooling fan |
| 4. LED charge status indicator | 10. Start/Select switch |
| 5. Heavy-duty 12V DC input alligator clips | 11. Display Mode Button |
| 6. Tamiya-style output (battery) connector | Charge transition beeper Auto-trickle charge |

Operating Guidelines

Connecting the Input Power Source

This charger is powered by either connecting the AC power cord to a 110V AC outlet or using the provided alligator clips to connect the charger to a 12V DC power source, such as a 12V hobby battery (HAN102) or an automobile battery. Connect the red (positive) end of the alligator clips to the red terminal of the DC power source and the black (negative) end of the alligator clips to the black terminal of the DC power source. If you choose to power your charger with an automobile battery, never do so with the automobile running!

Setting the Charge Perimeters

When power is supplied to the charger, the charger will beep and the cooling fan will begin to run. The display will default to the "Voltage" indicator.

Connect the battery to the charge lead. Use the included charge adapter (figure 1) if you are charging a radio battery. The charger will beep and the battery voltage will be shown on the LCD.

Notice which LED is flashing (figure 2). If it is not the LED indicating the chemistry of the battery cells you intend to charge, press and hold the Display mode button (figure 3) until the correct LED is flashing.

WARNING: Under no circumstances should a Li-Po battery be charged in the Ni-Mh or Ni-Cd modes. The charger will not terminate fast charge and personal injury and extreme damage may occur.

The LED will automatically start flashing faster at this point and the LCD display will automatically switch to the "Amps" mode (figure 4). Press the Current Adjustment buttons (figure 5) to increase or decrease the charge rate.

NOTE: Lower capacity radio batteries should be charged at no more than 1 amp. Higher capacity radio batteries (over 1000mAh) may be charged at 2 amps. Larger sub-C cell sport packs may be charged at up to 3.5 amps, and higher quality (matched cell) performance packs may be charged at higher rates. Consider that the higher charge rates may lower charge time but may not be as efficient as lower charge rates.

Press the Start/Select button (figure 6) to begin fast charging the pack. The Vision LCD (figure 7) will begin to flash while the charger analyzes the battery condition and automatically determines the cell count.

NOTE: If the charger notices a problem with the battery pack, such as shorted or weak cells, fast charge will not begin and the beeper will sound multiple times. Discard the battery pack.



As the battery becomes charged, the segments on the Vision LCD will increase. Once the pack is fully charged, the LCD will be fully illuminated. The charger will beep indicating the charger has entered a safe trickle mode. (See Trickle Charge section). Press and release the Display Mode switch to view the real time charge voltage, peak voltage, charge current and charge time displays.

Adjusting Charge Current During the Fast Charge Period

Once the fast charge period has begun, the charge current is locked in.

To change the charge current:

- Press the Start/Select button and the LED will begin to flash.
- Press the Display Mode Switch until the amps are displayed on the LCD.
- Press the Current Adjustment buttons to adjust the charge current.
- Press the Start/Select Button to resume fast charge.

Volts

The voltmeter function (figure 8) allows you to monitor the real time charge voltage of the battery to determine the battery's charge state. The voltage increases as the battery becomes charged.

Peak Volts

The Peak Volts (figure 9) records the highest voltage that the pack has reached during the charge period. The higher the battery's average voltage, the more power it can deliver. Fully charging and discharging a battery pack (cycling) can increase the Peak Voltage, translating into longer and faster runtimes.

Trickle Charge

When the LED is flashing, a low current pulsed trickle charge is being applied to the battery. Trickle charging safely maintains the charge capacity until you are ready to use the battery and helps equalize the cell voltage.

Boost (Repeak) Mode

After the battery has peaked and enters the Trickle Charge mode, you may enter the Boost mode by pressing the Start/Select button. The word "Boost" will be displayed on the LCD (figure 10). This mode allows you to fast charge the battery at 1 minute intervals after the battery has peaked to "top-off" the pack.

Charge Timer

The Charge Timer records the fast charge time in minutes (figure 11). To determine the charge capacity applied to the battery, multiply the charge time in hours by the charge current in amps.

Example:

4.00 amps X (18 minutes / 60) **0.3 hours** = 1.2 amp/hours (X1000 = **1200mA/h**)



Figure 7



Figure 8



Figure 9



Figure 10



Figure 11