



VISION LED AC/DC CHARGER

OPERATION MANUAL



Notice

All instructions, warranties, and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up to date product literature, visit <http://www.horizonhobby.com>

Meaning of Special Language

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this charger:

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.



WARNING: Read the ENTIRE instruction manual to become familiar with the features of the charger before operating. Never leave the charger unattended during use. Failure to operate the charger correctly can cause damage to the charger, battery, personal property or cause serious injury.

This is a sophisticated hobby product and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not attempt disassemble, use with incompatible components or augment product in any way without the approval of Horizon Hobby, Inc. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Introduction

Thank you for purchasing the Dynamite® Vision™ LED AC/DC Peak Detection Charger. The Vision line of chargers are high-performance battery chargers that can maintain the reliability and life of most battery packs.

Be sure to read the entire manual to become familiar with the features of the charger. Failure to understand the features of the charger can cause serious damage to the charger, battery or cause serious injury and damage to personal property.

Never leave the charger unattended during use.

Product Support

For technical assistance with this product, please contact the appropriate Horizon Product Support office. See page 10.

Specifications

Input: AC 110 to 240V DC 11.5 to 15V

Battery Type: Ni-Cd or Ni-MH

Battery Cell: Ni-Cd/Ni-MH; 4- to 8-Cell
(4.8V to 9.6V)

Charge Rate: 1.5A, 3A or 5A selectable

Charging Capacity: 1500 to 10000mAh

Trickle Charge Rate: 1/16 Fast Charge Rate

Output Wattage 40W



CAUTION: Attempting to charge batteries different than those specified in this manual can result in excessive heat and other related product malfunctions, which can lead to user injury or property damage. Please contact Horizon Hobby or an authorized retailer with compatibility questions.

Features

Setup mode and write memory.

DC input reversed polarity protection.

Battery Pack reversed polarity protection.

Internal Safe-Time: 120 minutes.

LED Functions

Standby: Cell LED on and Charge Rate flashing (slow)

Error: All LEDs flash together (quick)

Incorrect input voltage (below 11.0V or above 15V): Charge Rate LED flashes (quick)

Charge: Charge Rate LED and cell LED on, Charge level last step flashes (slow)

Charge complete: Charge level green LED solid on

Boost: Charge level green LED flashes (quick)

Buzzer Functions

Power on reset: 3 times (short)

Switches operation: 1 time (short)

Switches operation error: 2 times (short)

Error (battery short, reversed polarity, charger error, wrong battery type): 10 times (short)

Boost end: 1 time (long)

Peak full: 3 times (long)

Safe-Time full: 4 times (long)

Ni-MH & Ni-Cd Maximum Voltage full: 5 times (long)

To reset error, press the Mode button.

Available Charge Cords and Adapters

The Vision LED includes the Tamiya style charge cord (DYN5005). Dynamite offers charge cords and adapters for all your battery charging requirements. See the list below to order additional connectors.



DYN4003
Receiver Pack Charger Adapter



DYN5000
Charge Adapter Tamiya Female: Deans Male



DYN5001
Charge Adapter Tamiya Female: EC3™ Female



DYN5002
Charge Adapter Tamiya Female: EC5™ Female



DYN5003
Charge Adapter Tamiya Female: Losi Micro



DYN5004
Charge Adapter Tamiya Female to Losi Mini



DYN5005
Charge Adapter Banana to Tamiya Male



DYN5006
Charge Adapter Banana: Deans Ultra Male



DYN5007
Charge Adapter Banana: EC3 Female



DYN5008

Charge Adapter Banana: EC5 Female



DYN5010

12V DC Power Adapter with Cig Plug

Setup



AC POWER

To power your charger, connect the AC power cord into a standard 110V wall outlet.

NOTICE: Always consult 12V battery collateral materials or Horizon Hobby before using with sources other than standard 110AC wall outlet.

DC POWER

If you power the charger by using DC power, 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.

NOTICE: Always make sure that you follow proper polarities at all times.



CAUTION: Never connect the AC and DC input cords to an active power source at the same time. This will void the warranty, cause product damage and possibly injure the user.



CAUTION: If you choose to power your charger with an automobile battery, never do so with the automobile running as fluctuation in power can cause product malfunction and possibly injury.

NOTE: If using an automotive battery as a power source, do not run the engine.

It takes approximately 3 seconds for the charger to power up when power is applied.



CAUTION: See battery pack manufacturer's or vendors' specific charging rate instructions for charging. If charging current rate is not available, we recommend a charge current rate of 1C or less. (e.g., $1 \times 1500\text{mAh} / 1\text{h} = 1500\text{mA}$ or 1.5A). Do not charge cells smaller than sub-C cells over 2 amps or damage to the charger or battery may occur.

2. Choose the appropriate connector to fit your battery plug. Connect the red banana plug to the red (+) positive terminal on the front of the charger and the black banana plug to the black (-) negative terminal.

NOTICE: Always make sure that you follow proper polarities at all times.



3. Press the "mode" button to choose the number of cells that matches the battery that will be charged.



4. Press and hold the "mode" button to change the charge rate. Release the "mode" button when the LED matching your selected charge rate is on.

Battery Capacity	Charge Rate	Charge Time*
1500mAh	1.5A	60–80 Min.
3300mAh	3A	66–86 Min.
5000mAh	5A	60–80 Min.

* Charge times based on fully discharged batteries.



5. Connect the battery to the charge lead. Press the "Start" button once to begin charging.

The Start button can be pressed at any time to stop or resume charging.

The Charge Level LED's indicate how close the battery is to being fully charged.



WARNING: If at any time during the charge process the battery pack(s) become hot (over 140 degrees F), unplug the battery immediately and discontinue the charge process.



CAUTION: Never re-peak a warm battery as the overcharging can damage the products and possibly the user.

NOTICE: Check with the battery manufacturer to ensure re-peakng is possible. Failure to follow correct peaking procedure could cause damage to both the charger and battery packs.

OTHER WARNINGS AND PRECAUTIONS

Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

- Read all safety precautions and literature prior to use of this product.
- Never leave the battery and charger unattended during use.
- Never attempt to dismantle the charger.
- Never attach your charger to both an AC and DC power source at the same time.
- Never connect the charger to an automobile 12V battery while the vehicle is running.
- Never reverse the positive and negative terminals. Wrong connection will damage the battery and may cause damage to the charger.
- Never allow minors to charge battery packs without adult supervision.
- Never drop charger or batteries.
- Never attempt to charge dead or damaged batteries.
- Never attempt to charge a battery pack containing different types of batteries.
- Never charge a battery if the cable has been pinched or shorted.
- Never allow batteries or battery packs to come into contact with moisture at any time.
- Never charge batteries in extremely hot or cold places (recommended between 50-80 degrees F) or place in direct sunlight.
- Never connect the input jack (DC input) to AC power.
- Always use only rechargeable batteries. This charger cannot charge batteries such as "heavy duty," "Alkaline battery," or "Mercury battery."
- Always connect the positive red lead (+) and negative black lead (-) terminals of the battery to the charger terminals correctly.
- Always disconnect the battery after charging, and let the charger cool between charges.

- Always inspect the battery before charging.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.
- Always keep batteries and charger away from any material that could be affected by heat (such as ceramic and tile), as they can get hot.
- Always monitor the area, use a fire alarm and have a fire extinguisher available at all times.
- Always ensure program settings are correct to prevent battery damage or fire.
- Always make sure you know the specifications of the battery to be charged or discharged to ensure it meets the requirements of this charger. If the program is set up incorrectly, the battery and charger may be damaged. Improper settings can cause the battery to become overcharged potentially leading to fire or explosion.
- Always connect the battery charge cable/ adapter to the charger first, then connect the battery to avoid short circuit between the charge leads. Reverse the sequence when disconnecting.
- Never connect more than one battery pack to this charger at a time.
- Always ensure DC input is 11.5–15V.
- Always constantly monitor the temperature of the battery pack while charging.
- Always end the charging process if the charger or battery becomes hot to the touch or starts to change form (swell) during the charge process.

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Warranty and Repair Policy

Warranty Period

Exclusive Warranty- Horizon Hobby, Inc. (Horizon) warrants that the Products purchased (the “Product”) will be free from defects in materials and workmanship for a period of 5 year from the date of purchase by the Purchaser.

5 Year Limited Warranty

Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(a) This warranty is limited to the original Purchaser (“Purchaser”) and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

Warranty Services

Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a service technician.

Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. A Service Repair Request is available at www.horizonhobby.com on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

Non-Warranty Repairs

Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of 1/2 hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. Please note: non-warranty repair is only available on electronics and model engines.

United States:

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Service Center
4105 Fieldstone Road
Champaign, Illinois 61822
USA

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support
4105 Fieldstone Road
Champaign, Illinois 61822
USA

Please call 877-504-0233 or e-mail us at productsupport@horizonhobby.com with any questions or concerns regarding this product or warranty.

