

TWIN PEAK

AC/DC 1- to 7-Cell Ni-Cd and Ni-MH Dual Peak
Detection Charger

INSTRUCTION MANUAL



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USA

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www.dynamiterc.com



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 www.horizonhobby.com/ProdInfo/Files/dyn4033-manual.pdf.

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 a small or null 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 likely probability of physical property damage AND may lead to a dangerous condition or cause death or serious injury to the user, OR procedures, which if not followed, create the 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 can cause damage to the charger, battery, personal property or cause serious injury.

SAFETY 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 °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 charge cable 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 12V.
- 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.

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. 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 injury.

FEATURES

- 1- and 4-amp charge rates
- AC/DC input
- Peak detection charge circuitry
- Charges 4- to 7-cell Ni-Cd and Ni-MH battery packs
- Charges single cell Ni-Cd and Ni-MH battery packs
- Receiver pack charge lead included
- Voltmeter jacks
- 5-year limited warranty
- Auto trickle charge (100mA)

 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.

SUPPLY POWER TO THE CHARGER

The Twin Peak can either be powered by plugging it into a standard AC wall outlet (110V) or it can be connected to a 12V DC power source, such as an automobile 12V battery (engine not running) or a 12V DC power supply.

⚠ 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.

AC Power

To power the charger, use the attached standard electrical plug and plug into a standard 110V wall outlet.

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

DC Power

To power the charger, attach the included red (positive) alligator clip to the red (positive) terminal of the 12V power source. Attach the black (negative) alligator clip to the black (negative) terminal of the 12V power source. Make sure you follow proper polarities at all times.

⚠ WARNING: Always make sure that you follow proper polarities at all times or electrical shock will occur.

Charging 6/7-Cell Ni-Cd or Ni-MH Car Packs

1. Connect the Twin Peak to an appropriate AC or DC power source.
2. Connect the battery(ies) to the output charge lead(s). The LEDs on the faceplate indicate pack "A" and "B".

NOTE: The longer charge lead matches pack "B".

3. Push the Start button. A brief diagnostic test determines the charge current based upon the battery voltage. The LED will turn solid red during the charge process.
4. The charger will automatically charge at 4 amps and will stop fast charging when the battery has been fully charged. If you are charging two batteries simultaneously and one of the batteries peaks, the other battery will continue to charge until it has also peaked. After the battery has peaked, the charger will automatically switch to trickle charge. You will know that the charger is in trickle charge when the corresponding LED continually flashes.
5. If you choose to re-peak your battery(ies), simply push the Start button without disconnecting the battery(ies) from the output charge lead. Do not re-peak the battery(ies) more than once during a charge cycle.

* If at any time during the charge process the battery pack(s) become hot, unplug the battery immediately and discontinue the charge process.

NOTICE: Never re-peak the battery(ies) more than once during the charge cycle.

Charging 4/5-Cell Ni-Cd or Ni-MH Receiver Packs

1. Connect the Twin Peak to an appropriate AC or DC power source.
2. Connect the battery(ies) to the output charge leads with the included receiver pack charge lead adapter. The LEDs on the faceplate indicate pack "A" and "B".

NOTE: The longer charge lead matches pack "B".

3. Push the Start button. A brief diagnostic test determines the charge current based upon the battery voltage. The LED will turn solid red during the charge process.
4. The charger will charge the receiver packs at 1 amp. When the battery(ies) have peaked, the charger will stop fast charging and transition to trickle charge. If you are charging two batteries simultaneously and one of the batteries has peaked, the other battery will continue to charge until it has peaked as well. You will know that the charger is in trickle charge when the corresponding LED continually flashes.
5. If you choose to re-peak your battery(ies), simply push the Start button without disconnecting the battery(ies) from the output charge lead. Do not re-peak the battery(ies) more than once during the charge process.

NOTICE: Never re-peak the battery(ies) more than once during the charge cycle.

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

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

TRICKLE CHARGE

Once the battery pack has peaked, the charger will automatically transition to trickle charge. Because the Twin Peak can charge two packs at the same time, there will be times when one of your packs will be on trickle charge while the other battery is still fast charging. You will know the battery is on trickle when the LED changes from solid to flashing. The trickle charge rate is 100mA.

RE-PEAKING

Once the battery(ies) have peaked, you can re-peak them. With the battery packs still connected, simply push the Start button, and the LED will turn solid. When the battery packs have re-peaked, the charger will once again transition to trickle charge, and the LED will flash. Failure to follow this procedure could cause damage to both the charger and battery packs.

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

FUSES

This charger is protected by a 2-amp buss fuse (DYN4004). If you need to replace this fuse, always replace it with a fuse of the same rating. Your local hobby shop should stock this fuse. You may also find this fuse at automotive stores.

WARRANTY

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

(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).

Safety Precautions

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. The Product 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 injury.

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 Product Support representative.

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 ½ 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.