



RX, ECU & POWERBOX Batteries INSTRUCTIONS FOR USE

LITHIUM MANGANESE INSTRUCTIONS FOR USE

• Prior to using the DURALITE PLUS™ Battery System please read and follow the Safety Instructions on the reverse side of this sheet.

• Duralite Lithium Manganese packs feature a non combustible chemistry which simply means that they will not ignite if the cells are shorted or punctured.

• High discharge capacity of 20C continuous with 40C bursts along with the ability to fast charge the packs up to 10C making the Lithium Manganese pack a safer alternative to conventional Lithium chemistries.

• Stay Balance Charge Safe circuit built into pack - no need for external balancing. The circuit operates 24/7 to ensure that the cells are in optimal condition for use and prior to and after charging.

• Lithium Manganese chemistry batteries perform best if used often. With regular use they do not need to be cycled. They store best if not left in a fully charged state. If they are to be left for long periods of time (over 4 weeks without use) you should exercise them by charging them back up, and then discharging them to about 7.6 volts for a 2s RX, ECU or PowerBox pack. This should be performed every 4 - 6 weeks.

• It is recommended to use a DURALITE Plus™ charger. However other brands of programmable lithium chargers can be used as long as they are properly set for number of cells (2 for 7.4 volts, 3 for 11.1 volts and so on). **Note: If charging through the yellow charge lead the rate is not to exceed 1 amp maximum to avoid damage to the Stay Balance Charge Safe circuit.**

• Lithium Manganese packs can be safely fast charged through the red and black power output leads with a polymer charger at a recommend rate of 1C or 2C of the pack capacity. Example: A 3800 mah pack should be charged at 3.8 amps (1C) or 7.6 amps (2C). Charging at 10C of the pack rating will dramatically reduce the lifespan of the pack and is not recommended unless absolutely necessary.

• When using a Duralite charger and an optional A/C adaptor (#21915 or 21916) plug the adaptor into the charger and wall outlet. When using the 12-volt power chord hook the alligator clips to a fully charged 12-volt battery and plug into the charger. Plug the yellow battery charge leads supplied with your charger to the yellow lead coming from the 7.4 volt Li-Mn battery.

• A green light will come on to verify charging is in process. The light will go out when the battery reaches a full charge status (2 to 10 hours depending on the size of the battery and discharge state) and at that time you should disconnect the battery from the charger. ALWAYS BE PRESENT DURING CHARGING CYCLE. Always disconnect battery from charger when charging cycle is complete.

• Always check the battery voltage with a one-amp load prior to each flight. It is the pilot's responsibility to verify safe operating voltage before each flight.

• The charger's power supply receptacle is center negative and the charger's receiver and transmitter battery charging receptacles are center positive.

SAFETY INFORMATION & HANDLING PRECAUTIONS

Read this information prior to using product. Misuse of a battery may result in the battery generating heat, exploding or venting flame. Be sure to follow proper safety precautions.

- Do not short the battery.
- Do not use the battery with the positive and negative terminals reversed.
- Never disassemble or attempt to modify the battery in anyway. Never remove the protective shrink covering. Never remove the protective circuitry. Warranty is voided if the battery has been modified or altered in any way.
- Do not pierce the battery, strike the battery, crush the battery or subject the battery to strong impact.
- Do not directly solder to the battery.
- Do not immerse in water. Do not freeze the batteries.
- The temperature range over which the batteries may be discharged is -4° F (-20° C) to 140° F (60° C).
- Never subject the battery to sustained temperatures below -4° F (-20° C) or above temperatures of 140° F (60° C.)
- Temperature range over which the batteries may be charged is 32° F (0° C) to 113° F (45° C).
- Do not discharge the batteries below 5.6 volts. **Charge rate not to exceed 1 amp through the yellow charge lead.**
- If your aircraft suffers a crash, always carefully check the batteries for damage. Always dispose of a battery in an ecologically safe manner. Do not incinerate.

7.4 Volt Li-Mn RX, ECU, PowerBox & Electric Packs

- **Stop fly voltage** is when you reach **6.9 volts** as checked with a one-amp load lead.
- Check the battery with the DURALITE Digital Load Tester™. If fully charged the battery will read 8.35 volts or above with no load and at least 7.7 volts with a one-amp load. The measurement should be taken on either the power output lead(s) (black connector) or the yellow charge lead.
- Discharging the Batteries below 5.6 volts can damage the pack.

11.1 Volt Li-Mn ECU & Electric Packs

- **Stop fly voltage** is when you reach **10.8 volts** as checked with a one-amp load lead.
- Check the battery with the DURALITE Digital Load Tester™. If fully charged the battery will read 12.5 volts or above with no load and at least 11.8 volts with a one-amp load. The measurement should be taken on either the power output lead(s) (black connector) or the yellow charge lead.
- Discharging the Batteries below 8.5 volts can damage the pack.



ELECTRIC BATTERIES INSTRUCTIONS FOR USE

LITHIUM MANGANESE INSTRUCTIONS FOR USE

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- Duralite Lithium Manganese packs feature a non combustible chemistry which simply means that they will not ignite if the cells are shorted or punctured.
- High discharge capacity of 20C continuous with 40C bursts along with the ability to fast charge the packs up to 10C making the Lithium Manganese pack a safer alternative to conventional Lithium chemistries.
- Stay Balance Charge Safe circuit built into pack - no need for external balancing. The circuit operates 24/7 to ensure that the cells are in optimal condition for use and prior to and after charging.
- Lithium Manganese chemistry batteries perform best if used often. With regular use they do not need to be cycled. They store best if not left in a fully charged state. If they are to be left for long periods of time (over 4 weeks without use) you should exercise them by charging them back up, and then discharging them to about 7.4 volts for a 2s pack and 11.1 volts for a 3s pack. This should be performed every 4 - 6 weeks.
- Lithium Manganese packs can be safely fast charged through the red and black power output leads with a Lithium charger at a recommend rate of 1C or 2C of the pack capacity. Example: A 3800 mah pack should be charged at 3.8 amps (1C) or 7.6 amps (2C). Charging at 10C of the pack rating will dramatically reduce the lifespan of the pack and is not recommended unless absolutely necessary.

SAFETY INFORMATION & HANDLING PRECAUTIONS

Read this information prior to using product. Misuse of a battery may result in the battery generating heat, exploding or venting flame. Be sure to follow proper safety precautions.

- Do not short the battery.
- Do not use the battery with the positive and negative terminals reversed.
- Never disassemble or attempt to modify the battery in anyway. Never remove the protective shrink covering. Never remove the protective circuitry. Warranty is voided if the battery has been modified or altered in any way.
- Do not pierce the battery, strike the battery, crush the battery or subject the battery to strong impact.
- Do not directly solder to the battery.
- Do not immerse in water. Do not freeze the batteries.
- The temperature range over which the batteries may be discharged is -4°F (-20°C) to 140°F (60°C).
- Never subject the battery to sustained temperatures below -4°F (-20°C) or above temperatures of 140°F (60°C .)
- Temperature range over which the batteries may be charged is 32°F (0°C) to 113°F (45°C).
- Do not discharge the batteries below 5.6 volts.
- If your aircraft suffers a crash, always carefully check the batteries for damage. Always dispose of a battery in an ecologically safe manner. Do not incinerate.



TERMS & CONDITIONS OF USE

CAREFULLY READ THE FOLLOWING TERMS AND CONDITIONS BEFORE USING THE PRODUCT. USE OF THE PRODUCT INDICATES YOUR ACKNOWLEDGMENT THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS.

The purpose of these terms & conditions is to warn you of the safety considerations surrounding products of this type so that you are better informed when making decisions and taking precautions concerning their use. These batteries are intended for RC flight only, no other use is approved. Because RC Modeling invariably requires decisions about preparation and deployment to pass beyond our control (and that of our retailers or agents) your decision to use this product incorporates your agreement that you have read, understood & follow the safety precautions printed here and that you agree to accept full responsibility for any injury, loss or damage resulting from all circumstances surrounding your use or misuse of this product and that you will hold D3 Portable Energy, Inc. harmless & defend it in any action arising out of its use.

You are also responsible for inspecting and detecting any signs of damage or defect before and after flight and prior to charging and to discontinue use immediately if any such issue arises and that you understand that you should never charge li-ion & li-po batteries unattended.

IF YOU DO NOT AGREE TO THESE TERMS OF USE, YOU ARE UNDER NO OBLIGATION TO PROCEED; INSTEAD YOU MAY CONTACT THE PLACE OF PURCHASE AND RETURN THE PRODUCT WITHIN 30 DAYS OF PURCHASE WITH THE ORIGINAL SALES INVOICE IN ITS ORIGINAL CONDITION FOR A FULL REFUND.

WARRANTY: APPLICABLE WITH PROOF OF PURCHASE ONLY

NOTE: All batteries are considered perishable items and therefore have a shelf life. The life cycle of a battery starts at the date of manufacture.

DURALITE PLUS™ Li-ion Batteries - 2 Year Pro-Rate

D3 Portable Energy, Inc. (seller) warrants its DURALITE PLUS™ batteries & Regulators to be free of defects in material and workmanship. This warranty is effective for 24 months from date of purchase. If within the warranty period the customer is not satisfied with the products performance resulting from a manufacturing defect, the battery or accessory will be replaced or repaired based on the following pro-rated formula:

First 4 months: Free Repair or Replacement

5th - 12th mth: Free Repair, Product replaced at 50% discount off retail

Second Year: Product replaced at 15% discount off retail* price.

For warranty issues, call 1-877-744-3685 prior to sending any items for service.

LIMITATION OF REMEDIES AND LIABILITY

Except as otherwise specifically stated herein, D3 Portable Energy, Inc. disclaims and excludes to the greatest extent allowed by law all express and implied warranties for its products. Such disclaimer applies to and any and all express and implied warranties, including, but not limited to, the implied warranty of merchantability and any warranty that the product is fit for any particular use. The remedies above are the sole and exclusive remedies available to purchaser for any failure of the product, given the difficulties of proof of loss.

Neither D3 Portable Energy, Inc. nor anyone else who has been involved in the creation, production or delivery of the product shall be liable, except as stated above, to you for any damages of any type, including, but not limited to, any lost profits, lost saving, personal injury, property damage, loss of anticipated benefits, or other incidental liability tort, or consequential damages arising out of the use or inability to use the product, whether arising out of contract, negligence, strict tort, or under any warranty, or otherwise, even if D3 Portable Energy, Inc. has been advised of the possibility of such damages or for any other claim by any other party. D3 Portable Energy, Inc.'s liability for damages in no event shall exceed the price of the product under the prorated amounts set out above.

GENERAL PROVISIONS:

1. The above warranty only extends to the original purchaser and is not transferable or assignable.
2. It is recommended to use a DURALITE Plus™ charger. However other lithium chargers can be used as long as they are properly set for 2 cells (7.4 volts for RX packs) or 3 cells (11.1 volts for TX packs). **Note: The charge rate is not to exceed 1 amp maximum to avoid damage to the balancing circuit.**
3. Any damages or problems with the battery Product arising out of the Failure to follow the "DURALITE PLUS™ Battery Instructions For Use" & "DURALITE PLUS™ Battery Safety Information & Handling Precautions" shall void the above warranty on the battery Product.
4. All return shipping costs are the responsibility of the customer. COD shipments not accepted. Warranty returns must be approved prior to shipping. Contact 1-877-744-3685 prior to sending any items for service.
5. Tampering with or changing the Product in any way will void the above warranty.
6. D3 Portable Energy, Inc. reserves the right to change or modify this warranty without notice.
7. By using the product, buyer agrees that all disputes arising out of purchase and/or use of the product shall be governed by the Laws of the State of Washington, regardless of the nature of the dispute, including, but not limited to, disputes or claims arising out of tort, contract, statute, product liability or under any warranty or term and condition of the acquisition.
8. All disputes arising out of use and/or purchase of the product shall be brought in the Washington State Superior Court, Whatcom County, which is located in Bellingham, Washington; buyer by purchasing the product hereby waives any challenge to subject matter or personal jurisdiction by the Washington State Superior Court, Whatcom County.

Distributed World Wide
By D3 PORTABLE ENERGY, INC
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Manufactured Exclusively for
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