Congratulations on your purchase of the IntelliPeak™ Pulse Charger by DuraTrax®! A step up from traditional "sport" chargers, the IntelliPeak Pulse Charger’s many exceptional features combined with a very easy-to-use format make it attractive to competition-level racers and sport users alike.

**SPECIAL FEATURES**

- Advanced fuzzy logic peak detector with automatic cut-off circuit featuring high efficiency P-Channel MOSFET drive transistors
- 8-bit 4MHz CPU with 8K ROM, 1K RAM, 1-channel 16-bit analog-to-digital converter
- 8-bit pulse width modulated charge current to charge NiCd or NiMH batteries to 100% without overcharging
- Built-in Artificial Intelligence to eliminate false peaks

**IMPORTANT CARE AND HANDLING INSTRUCTIONS FOR NiMH BATTERIES**

While similar in appearance to sub-C NiCd batteries, NiMH batteries have a different internal chemistry and require a different charging method. It is important not to allow NiMH batteries to overheat while being charged. Heat can adversely affect the performance of NiMH batteries. When charging NiMH batteries with the IntelliPeak Pulse Charger, do not adjust the PEAK CHARGE AMPS adjustment knob above 3.0 amps. Charging at a higher amperage will heat up the batteries and could cause permanent damage. If overheating is observed, disconnect the battery from the charger immediately, and reduce the charge rate for future charging needs. Also, do not deep cycle NiMH batteries. Permanent damage could result. Store NiMH packs with some voltage remaining on the cells. Use a NiMH battery pack no more than three cycles per day, with a two to three hour break in-between for cooling. More frequent use is likely to overheat the pack.

**IMPORTANT PRECAUTIONS**

- Charge only nickel-cadmium or nickel-metal hydride rechargeable batteries. Damage may occur from other types of batteries.
- Do not use automotive type battery chargers to power the charger.
- Do not allow water, moisture or foreign objects into the charger.
- Do not cover the air intake holes on the charger. This will cause the charger to overheat.
- Do not charge batteries containing fewer than 4 cells
- Always connect the power supply first.
- Do not use a cable longer than 30cm to connect the charger with the batteries.
- Do not leave the charger unattended while charging. Disconnect the battery immediately if the charger becomes hot. Allow the charger or battery to cool down before reconnecting.
- Keep out of reach of children.
- Do NOT discharge cells smaller than sub-C size cells.

Unlike most other chargers, the IntelliPeak Pulse Charger is capable of charging both nickel-cadmium (NiCd) and nickel-metal hydride (NiMH) battery chemistries, as identified by this symbol. Look exclusively for battery chargers with this symbol to handle both NiCd and NiMH charging needs.

**INSTRUCTIONS FOR NiMH BATTERIES**

If using a DC power supply or 12V DC battery for input power, connect the DC adapter (included) to the lead exiting the rear of the charger. Attach the red alligator clip to the positive (+) terminal on the power supply, and the black alligator clip to the negative (-) terminal. It’s best to use a clean DC power source whose output is filtered to remove unwanted electrical noise. Disconnect the DC input adapter cord from the charger when not in use.

**DC INPUT POWER**

The IntelliPeak Pulse Charger offers a slow 100mA trickle charge rate for charging a new battery or topping off a previously charged battery. Connect the battery to the charge lead on the front of the charger. The green SLOW CHARGE LED should automatically begin to flash, indicating trickle charge is in progress. A 1500mAh battery should reach full charge in approximately 15 hours using this charge method.

**OUTPUT LEAD**

The output lead (included) has a standard style connector at one end, with the opposite wire ends stripped so a small portion of bare wire is showing. Insert the red, positive (+) wire into the red spring loaded terminal on the front of the charger. Install the black, negative (-) wire into the black spring loaded terminal. These terminals allow virtually any other charge leads to easily be connected to the charger if so desired. CAUTION: Make sure wire strands never make connection between the red and black terminals! Failure to do so could result in a short circuit condition, causing the fuse to blow or permanent damage to the charger and/or battery.

**SLOW CHARGING**

This unit has a high-rate fast charge to recharge a partially discharged battery, with circuitry designed to monitor pack voltage and automatically terminate fast charge when full charge is reached. Select the desired charge rate using the PEAK CHARGE AMPS adjustment knob. Connect the battery to the charge lead on the front of the charger. The green SLOW CHARGE LED should automatically begin to flash, indicating trickle charge is in progress. Push the MODE SELECT button once to start peak charging. The red PEAK CHARGE LED should light, and the charger will beep once to confirm peak charge is in progress. When this LED begins to flash the battery is approaching peak charge. This should soon be followed by occasional flashing of the STATUS LED, where each flash represents instantaneous moments when actual battery voltage is starting to decline, thus indicating the battery has reached peak and the charger will soon return to slow charge automatically.

**WARNING:** Do not leave charger unattended during fast charge. If the battery or charger become hot at any time, disconnect the battery from the charger immediately! Failure to do so may cause permanent damage to the charger and battery, and may cause bodily harm. Reduce the charge rate for future charging needs.

**AC INPUT POWER**

If using 110V AC for input power, connect the black AC plug to a regular 110V wall outlet. Do not connect the DC input leads to any power source simultaneously with AC input, as permanent damage to your charger may result.

**FUSE PROTECTION**

The IntelliPeak Pulse Charger is fuse protected from current overload. Only replace the glass fuse with one of the same rating (250V/3A) and size (5 x 20mm). CAUTION: Disconnect the charger from the AC power source and the load battery from the charger before replacing the fuse.
Do NOT charge 4 or 5 cell batteries at a rate greater than 4.5A, as this could cause excessive heating in the charger itself.

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>LED DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Battery</td>
<td>Discharge LED OFF</td>
</tr>
<tr>
<td>Slow Charging</td>
<td>OFF</td>
</tr>
<tr>
<td>Fast Charging</td>
<td>OFF</td>
</tr>
<tr>
<td>Discharging</td>
<td>OFF</td>
</tr>
</tbody>
</table>

DuraTrax warrants this product to be free from defects in materials and workmanship for a period of 1 year from the date of purchase. During that period, we will repair or replace, at our option, any product that does not meet these standards. You will be required to provide proof or purchase date (receipt or invoice). If during the 1 year period, your DuraTrax product shows defects caused by abuse, misuse, or accident, it will be repaired or replaced at our option, at a service charge not greater than 50% of the current retail price. Be sure to include your daytime telephone number in case we need to contact you about your repair. This warranty does not cover components worn by use, application of reverse voltage, cross connections, poor installation, subjection of components to foreign materials, any alterations to wires, or tampering. In no case shall our liability exceed the original cost of the product.

Your warranty is voided if...

A. You allow water, moisture, or any foreign material to enter the charger case.
B. You tamper with any of the electronic components.
C. You exceed minimum or maximum cell specifications for the battery pack.
D. You allow water, moisture, or any foreign material to enter the charger case.
E. You apply reverse voltage by connecting the battery pack backwards.

Under no circumstances will the purchaser be entitled to consequential or incidental damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If you attempt to disassemble or repair this unit yourself it may void the warranty.

For service to your DuraTrax product, either in or out of warranty, send it post paid and insured to:

Hobby Services
1610 Interstate Drive
Champaign, IL 61822
(217) 398-0007
e-mail: hobbieservice@hobbico.com
Internet Address: www.duratrax.com

For DTXZ4100 for DTXP4100  V1.2