

IC Series User Manual



900W & 1200W Industrial Battery Chargers Original Important Safety and Operating Instructions

Save these instructions. This manual is for the Delta-Q IC Series Industrial Battery Charger. Please read this information in its entirety before using your Delta-Q Charger. For technical support, contact the manufacturer of your vehicle or machine; or contact the distributor as their version of this charger may require unique operating instructions.

Instructions importantes concernant la sécurité

Conserver ces instructions. Ce manuel contient des instructions importantes concernant la sécurité et le fonctionnement.



WARNING

Use the charger only with an algorithm that is appropriate to the specific battery type and capacity. Other usage may cause personal injury and damage. Lead acid batteries may generate explosive hydrogen gas during normal charging. Keep sparks, flames, and smoking materials away from batteries. If this charger is used with lithium-ion type batteries, an integrated battery management system (BMS) must be used. The BMS must ensure that, in all operating modes, the battery cells are protected from inappropriate levels of voltage, current, temperature, and state of charge. Do not operate the charger in a closed-in area or restrict ventilation. Never charge a frozen or non-rechargeable battery. Observe all battery manufacturers' precautions (e.g., maximum charge rates and if cell caps should be removed while charging).



DANGER

Risk of electric shock. Connect charger power cord to an AC outlet that has been properly installed and grounded in accordance with all local codes and ordinances. A grounded AC outlet is required to reduce the risk of electric shock—do not use ground adapters or modify the plug. Do not touch uninsulated portions of the output connector or uninsulated battery terminals. Disconnect the AC supply before making or breaking the connections to the battery. Do not open or disassemble the charger. Do not operate this charger if the AC supply cord or DC output cord is damaged or if the charger has received a sharp blow, been dropped, or is damaged in any way. Refer all repair work to the manufacturer or qualified personnel. This charger is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge on electrical systems and battery charging, unless they have been given supervision or instruction concerning use of the charger by a person responsible for their safety. Children should be supervised to ensure they do not play with the charger.



ATTENTION

Utiliser le chargeur seulement avec un algorithme approprié au type et capacité spécifique de batterie. D'autres types de batteries pourraient éclater et causer des blessures ou dommages. Les batteries au plomb peuvent produire des gaz explosifs en service normal. Ne jamais fumer près de la batterie et éviter toute étincelle ou flamme nue à proximité des batteries. Si ce chargeur est utilisé avec des batteries au lithium-ion, un système de gestion des batteries intégré doit être utilisé. Le système de gestion des batteries doit assurer que dans tous les modes de fonctionnement, les cellules de la batterie sont protégées contre les niveaux inappropriés de tension, de courant, de température et d'état de charge. Fournissez une ventilation adéquate du chargement. Ne jamais charger une batterie gelée. Prendre connaissance des mesures de précaution spécifiées par le fabricant de la batterie, p. ex., vérifier s'il faut enlever les bouchons des cellules lors du chargement, et les taux de chargement.



DANGER

Risque de décharge électrique. Ne pas toucher les parties non isolées du connecteur de sortie ou les bornes non isolées de la batterie. Toujours connecter le chargeur à une prise de courant mise à la terre. Déconnectez la source CA avant de faire ou défaire les connexions à la batterie en chargement. Ne pas utiliser le chargeur si le cordon d'alimentation CA est endommagé ou si le chargeur est abîmé suite à une chute ou autre incident. Ne pas ouvrir ni désassembler le chargeur – référer toute réparation aux personnes qualifiées. Cet appareil n'est pas destiné à un usage par des personnes (dont les enfants) avec des facultés motrices, sensorielles ou mentales réduites, ou ayant une expérience et des connaissances insuffisantes, à moins qu'elles sont sous la supervision ou reçoivent les instructions sur l'utilisation de l'appareil d'un répondant garant de leur sécurité. Les enfants devraient être surveillés afin qu'il ne jouent en aucun temps avec l'appareil.

Safe Operating Instructions

- ❖ The charger contains up to 25 selectable charging algorithms stored in its internal memory to charge batteries. These algorithms are specific to each manufacturer and model of battery. Your equipment supplier or charger distributor is responsible for ensuring the active charge algorithm matches the battery pack charging requirements. Contact them with any questions about which algorithm to select for each battery pack.
- ❖ The charger may become hot during charging. Use hand protection to safely handle the charger when charging.
- ❖ To maintain safe operations, the unit automatically reduces its output power if the temperature rises above set thresholds, or if the AC input voltage is too low.
- ❖ If power is interrupted, and then returns, the charger starts and continues to operate without hazard to the user, or damage to the batteries.
- ❖ Unplug the charger from both AC and DC sources when cleaning, moving, or conducting any maintenance or repair on the charger. No user serviceable parts are inside. Do not remove the cover due to the risk of electrical shock.
- ❖ Do not expose the charger to oil, dirt, mud, or direct heavy water spray when cleaning the vehicle or machine.
- ❖ If the detachable AC input power cord set or DC output cord is damaged, do not use the charger until they are replaced with cord sets appropriate to your region and application.
- ❖ When mated with a Delta-Q Technologies sealed AC cord, the charger meets IP66 specifications, making it dust-tight and protected against powerful water jets. If a cord set with an unsealed connector is used, the plug and connector must be periodically inspected to ensure the contacts are clean and dry.
 - ❖ If this charger is provided with an AC cord set and the power plug does not match the power outlet, contact the equipment manufacturer, distributor, or Delta-Q Technologies for the correct AC cord set terminating with a 3-prong plug suitable for your region's grounded power outlet.
 - ❖ In North America (and other 120V AC regions), the AC cord must be a 3-conductor UL Listed/CSA approved detachable cord set at least 1.8m in length (≥ 6 feet), minimum 16 AWG and rated SJT; rated 105°C, and terminated with 125V, 13A, or greater connector.
 - ❖ In Japan, the AC cord must be a 3-conductor PSE approved detachable AC cord set, rated 105°C, and terminated with 100V, 15A, or greater connector.
 - ❖ In 220-240VAC regions, the AC cord must be a 3-conductor safety-approved cord set, with 1.5mm² conductors (min.), rated appropriately for industrial use. The cord must be terminated on one end with a grounding type input plug appropriate for use in the country of destination; both plug and connector should be rated 250V, 10A, or greater.
- ❖ Extension cords must be 3-wire cords no longer than 30m (100') at 10 AWG or 7.5m (25') at 16 AWG, per UL guidelines.

This is a Class A product complying with United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 15. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Identifying the Charger Serial Number

The serial number is printed on the front of the charger. Use this number when requesting technical support.



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WARNING



- Always charge the battery in dry conditions with the vehicle in dry state.
- Prohibit battery charging outdoors in rainy days.

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