

CTEK LITHIUM XS

12V/5A



The LITHIUM XS is an advanced microprocessor controlled charger specially designed to recharge and maintain Lithium-lon Phosphate (LiFePO $_4$ ) batteries — maximising their performance and lifespan. With up to 5A of charge current available the LITHIUM XS is extremely flexible and will charge LiFePO $_4$  batteries from 5Ah to 60Ah and maintain up to 120Ah.

Operation is simple and charging will commence upon connection. With no need to disconnect the battery from the vehicle, at charge start the LITHIUM XS will automatically reset any low voltage protection electronics (Battery Management System) fitted. Charging can be restarted manually at any time using the "Reset" button.

The LITHIUM XS is a fully automatic "connect and forget" charger with 8 charging steps including a testing sequence to show if the LiFePO<sub>4</sub> battery can take and retain charge, a unique maximisation step to restore full capacity, and patented maintenance charging to ensure maximum performance even after months of inactivity. Splash proof and dust proof (IP65) the LITHIUM XS is easy and safe to use, protects vehicle electronics, spark-free, reverse polarity protected and short circuit proof. The LITHIUM XS features a 5-year warranty.

# TECHNICAL DATA

CHARGING VOLTAGE	13.8/14.4 VDC
CHARGE CURRENT	Max 5A
TYPE OF CHARGER	8-step, fully automatic charging cycle
TYPE OF BATTERY	12V Lithium Ion Phosphate (LiFePO <sub>4</sub> )
BATTERY CAPACITY	5-60Ah, maintenance charging up to 120Ah
PROTECTION RATING	IP 65 (splash and dust proof)



CHARGING AND MAINTENANCE

Step 3 - Battery ready to use



Step 7 - Fully charged battery



Step 8 - Maintenance charging



Fully automatic for optimal charging



For Lithium-Ion Phosphate LiFePO<sub>4</sub> batteries







# 12V/5A



**Complete LiFePO<sub>4</sub> battery care** – unique and patented system to recover, charge and maintain LiFePO<sub>4</sub> batteries to maximise performance and extend life.

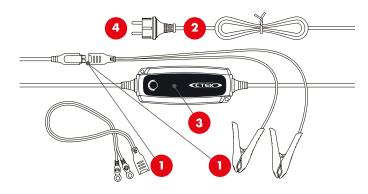
**Safe to use** – user safety through spark free operation and reverse polarity protection. Vehicle electrical safety through exceptionally clean voltage and current delivery with no surges or spikes. No need to disconnect battery from the vehicle when charging.

 $\begin{tabular}{ll} \textbf{Connect and forget}-simple plug and play operation. Manual Reset available. \end{tabular}$ 

**Unique 8 step charging** – the patented 8 step programme tests battery condition and, charges and maintains to ensure maximum LiFePO $_4$  battery life and performance. FLOAT/PULSE maintenance ensures ideal battery care during periods of inactivity.

**Extends battery life** – the unique features of CTEK chargers combine to maximise performance and extend LiFePO<sub>4</sub> battery life.

#### **CONNECT AND FORGET**



- 1. Connect the charger to the battery.
- 2. Connect the power cord to the power outlet. The power-on lamp is lit.
- 3. Charging starts.
- 4. Stop charging at any time by disconnecting the mains cable from the wall socket.

#### **UNIQUE 8 STEP CHARGING FROM CTEK**



# STEP 1 ACCEPT

Tests if the battery can accept charge. This step prevents charging from proceeding on a defective battery.

# 2 STEP 2 BULK

Charging with maximum current until approximately 90% battery capacity.

# **3** STEP 3 ABSORPTION

Charging with declining current to maximize up to 95% battery capacity.

#### 4 ANALYZE

Tests if the battery can hold charge. Batteries that can not hold charge may need to be replaced.

### 5 STEP 5 COMPLETION

Final charge with reduced current up to approximately 98% battery capacity.

# **6** STEP 6 MAXIMIZATION

Final charge with maximum voltage up to 100% battery capacity.

#### **STEP 7** FLOAT

Maintaining the battery voltage at maximum level by providing a constant voltage charge.

# **(3) STEP 8** PULSE

Maintaining the battery at 95 - 100% capacity. The charger monitors the battery voltage and gives a pulse when necessary to keep the battery fully charged.

## **GUARANTEED QUALITY WITH CTEK**

CTEK customer support is available to answer any questions related to charging and CTEK chargers. Safety, simplicity and flexibility characte-rizes all products and solutions developed and sold by CTEK. CTEKsupply chargers to more than 60 countries throughout the world. CTEK is also a reliable OEM supplier to many of the world's most prestigious car and motorcycle manufacturers.

Contact customer support: info@ctek.com

